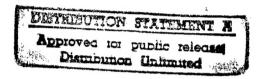
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Soviet Union Military Affairs

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Georgian Meeting on Fall 1989 Draft

18010010 Moscow KRASNAYA ZVEZDA in Russian 6 Oct 89 First Edition p 1

[Major N. Kovalev, Transbaykal Military District: "On the Eve of the Draft".]

[Text] A Regional meeting of the Secretaries of the Rayon committees of the Communist Party of Georgia, dedicated to problems of the military-patriotic upbringing of youth, as well as the upcoming fall draft into the Armed Forces was held in Gori. Responsible workers of the Central Committe of the Communist Party of Georgia, the Political Directorate of the [Military] District and the military commissariates took part.

The meeting's participants discussed a broad circle of problems, of which many have been accumulated recently. In particular, attention was drawn to the neglect of individual work with draftees and the decline in interest by young people in service in the army.

The talks at the meeting were businesslike and substantive. They were also concerned with questions connected with the military service of those sent from the Republic, and the formation at the military commissariates of a large aktiv of reserve officers and afghan veterans.

Kutsev on Pre-Draft Training, Student Retirement

90UM0036B Moscow KRASNAYA ZVEZDA in Russian 11 Oct 89 First Edition p 2

[Interview with G.F. Kutsev, deputy chairman of the USSR State Committee for Public Education: "Much Depends Upon the Military Instructor's Personality"]

[Text] G. Kutsev, deputy chairman of the USSR State Committee for Public Education, answers questions posed by Lt Col G. Lisenkov, KRASNAYA ZVEZDA correspondent.

[Lisenkov] A great deal has recently been done to improve the performance of the general education school. The system of initial military training has practically been unaffected by the restructuring principles, however. One has the impression, Gennadiy Filippovich, that this system is in disfavor with those in charge of the USSR State Committee for Public Education, that it is regarded as an outcast.

[Kutsev] I do not believe there is any basis for saying that. The leadership of the USSR State Committee for Public Education and local public agencies, together with the military commissariats, have outlined a number of steps to improve the military training of students in secondary educational institutions and their preparation for active military duty. It is another matter that we have not yet been able fundamentally to restructure and renew the military training of the students, but positive changes have occurred in it. The first steps have been taken.

For example, steps have been taken to screen military directors for secondary schools, vocational and technical schools and tekhnikums. More than 2,000 graduates of the

departments of initial military training and physical education at teachers' institutes have been assigned as military instructors. They all recently completed their service in the army or navy. You know that many far-from-young military instructors have worked and are still working at the schools. They can explain military affairs, but when it comes to demonstrating drill procedures with weapons, the procedure for overcoming obstacle courses and so forth, this is somewhat difficult for them. Admissions to departments for training military instructors have now been increased at eight VUZs. Another such department has been set up at the Volgograd Teacher's Institute.

The school directors and military commissars invite to work as military instructors young officers discharged as a result of the reduction in the Armed Forces.

Much depends upon the military instructor's personality. Among the military instructors there are many real experts, God-sent teachers, as they say. They are frequently held in the greatest esteem by the upper-grade students. It is from these schools that our military schools receive their main replenishments. Capt (ret) Aleksey Naboychenko, military instructor at Secondary School No. 20 in Tashkent, Lt Col (ret) I.N. Ivashchenko, military instructor at Secondary School No. 1206 in Moscow, Aleksey Prilipa, soldier/internationalist at School No. 90 in Moscow, and many others, for example.

Many military instructors hold the honorary title "Honored Teacher of the Republic." I shall name just a few of them. They include Ye. Komarov (RSFSR), F. Tverdun, (the Ukraine), G. Arvedladze (Georgia) and V. Shlykov (Tajikistan). Many military instructors have been awarded the badge "Expert in Education."

We do not doubt that such cadres will be able to introduce a fresh element into the improvement of initial military training and the military-patriotic indoctrination of the youth.

We are still not satisfied with the overall state of initial military training, however. Military commissars and commanders of military units justifiably complain about the poor preparation of the youth for military service.

Some of the young people have pacifist sentiments. They refuse to serve in the army or to take the military oath. There are many complaints about the physical conditioning of the future fightingmen. They lack strength and cross-country conditioning, and not all of them know how to swim. Some of the draftees, particularly those from the republics of Central Asia, the Transcaucasus and a number of regions of the RSFSR, cannot meet the GTO [ready for work and defense] standards.

The technical military training of the students is not satisfactorily organized. There are extremely few groups and sections for the applied military [sports]. I would ask the DOSAAF organizations, military schools and military units to assist the schools, vocational and technical schools, and tekhnikums more with respect to technical and other equipment.

We have not yet done everything possible to improve the makeup of military instructors at educational institutions, particularly those at the rural schools.

[Lisenkov] Exempting students from the military service has placed the Armed Forces into a difficult situation. The units and ships are now deprived of the most intellectual segment of the youth, those assigned to positions of responsibility in the sections and on the teams and crews. How can we compensate for these losses? Do you see any basic way to enhance the pre-draft training of the student youth?

[Kutsev] I understand that the early discharge of students into the reserve has truly placed certain military units into a difficult situation. You will agree that this is a temporary phenomenon, however. In a few years the Armed Forces will be receiving VUZ graduates who have received no training in the military departments. And there are more than 400 VUZs which have no military departments. The Armed Forces will receive educated replenishments in the graduates from these educational institutions. This will be a considerable compensation, in your words, for the losses which the military units have presently suffered. We have to live through this period, this critical time.

I believe that one important way to enhance the pre-draft training of the youth is to reinforce the physical education in it and to bolster physical education classes in the upper grades with the applied military sports. We need to do more to develop strength, stamina and dexterity in the students, particularly the youth, in the initial military training and physical education. They absolutely must be taught how to swim.

In other words, we must introduce the applied military sports more extensively at the educational institutions and make better use for this purpose of the existing athletic facilities of educational institutions, volunteer sports organizations, particularly the "Working Reserves" sports societies, DOSAAF organizations, health camps and training centers of military commissariats and military units.

The extensive development, together with DOSAAF, of the applied military and technical sports at educational institutions is another way to improve the pre-draft training of the youth. We must establish groups and sections for these types of sports and hold competitions. We have to see to it that every school, vocational and technical school and tekhnikum has at least two or three groups or sections for the applied military and technical sports. I am convinced, for example, that every graduate should know how to drive a motor vehicle. The conditions have to be created for this, however.

[Lisenkov] Since initial military training came into being, repeated attempts have been made to reorganize it, but they have produced no perceptible benefit. Do you not think that it is time to change the very concept of initial military training? Perhaps it would be worthwhile to appoint a temporary scientific team to work out the concept?

[Kutsev] I believe that it is time to alter the concept itself and the approaches taken to the initial military training of the youth. The system of initial military training for girls has been changed. They no longer receive general military training. The USSR Ministry of Defense and the DOSAAF Central Committee have worked out proposals for restructuring military training for the student youth in secondary educational institutions and for improving their preparation for active military duty. These proposals have been sent to all the Union republics and to all ministries and departments concerned for discussion.

Naturally, in approving such documents we must adhere strictly to the Law of the USSR on Universal Military Duty and the Statute on Initial Military Training of the Youth. No one has repealed them. It is difficult to agree with those educational institutions which are unjustifiably reducing the amount of time allocated for initial military training and eliminating the position of military instructor. This is inadmissible.

I must mention the fact that attempts are being made to find conflicts between Order No. 540 of the USSR State Committee for Public Education and the newly approved interim "Statute on Initial Military Training of the Youth" for educational institutions. This is fundamentally wrong. The youth simply do not have the right to cover the initial military training program with unsatisfactory marks. We cannot neglect our nation's defense capabilities. It is important that after being drafted for active military duty, the youth are able rapidly to master the modern weapons and combat equipment. I regard this as the main requisite for a further reduction in the service terms.

The suggestion that a temporary scientific team be set up to develop the concept of initial military training and military-patriotic indoctrination of the youth is worthy of consideration. After this has been completed, in my opinion, we must immediately set about developing new programs for the initial military training and physical conditioning. And perhaps it would be a good thing to work out several alternative programs and perform the necessary experiments with them.

[Lisenkov] Let us imagine, Gennadiy Filippovich, that you are the commander of a unit which has just received another group of replenishments, the kind, I believe, with which you are familiar. What would you say to those individuals responsible for the pre-draft training of the youth, including Gennadiy Filippovich Kutsev, deputy chairman of the USSR State Committee for Public Education?

[Kutsev] I would take your question as a joke, since I have never imagined myself as the commander of a military unit. I earned the rank of a reserve officer in the military department at an institute, after all, and attended military assemblies in the Transbaykal. I am grateful to my mentors for this knowledge.

Since you have asked this unusual question, however, I must answer it. There is no evading it, as they say.

I believe that every commander who has familiarized himself with new replacements under his command should determine what is good and what is bad in their pre-draft training. For the good training, he should say thank you to the educational institution where the draftee trained and studied. For poor training, he should express critical comments, wishes and recommendations for eliminating the deficiencies.

To conclude our interview, I would like to say that the mass media, including KRASNAYA ZVEZDA, devote little attention to the military training of the youth and their preparation to serve in the military. When such material does appear in the newspapers and in radio and television broadcasts, it is ordinarily negative. In addition to the criticism—and criticism is needed!—it would be worthwhile to provide more information on the experience of the outstanding schools and on the military instructors who are making a large contribution to the military training of the students.

I know that your newspaper has the very good intention of publishing a series of articles on the military instructors who are honored teachers of the republics. I feel that these people are worthy of the attention and of a good word in the military newspaper.

All-Army Conference of Ideological Workers

90UM0036A Moscow KRASNAYA ZVEZDA in Russian 11 Oct 89 First Edition p 1

[Interview with participants in All-Army Conference of Ideological Workers by Lt Col I. Sas and Maj S. Kusher, KRASNAYA ZVEZDA correspondents, under the rubric "Ideological Work: Topical Interviews": "The Potential of the Party Word"]

[Text] The All-Army Conference of Ideological Workers opened at the Central Soviet Army Club imeni M.V. Frunze in Moscow on 10 October. Our correspondents interviewed several of the participants.

[Correspondents] Vladimir Alekseyevich, you certainly have the right to refuse to be interviewed if only because it is actually physically difficult to cross so many time zones at one time," is how the interview with Lt Col V. Mileshkin, deputy chief of a political section in the Far East Military District, began.

[Mileshkin] That is true. One somehow loses his sense of time, his temporal bearings. Incidentally, although this is not quite an accurate analogy, something of the sort is occurring also in the ideological work today. The ideological situation is changing so dynamically and different political and ideological trends are manifesting themselves so forcefully that some of our cadres, who are accustomed to complete unanimity and uniformity, have suffered a loss of initiative.

I must say, however, that this condition in the restructuring process goes away. Slowly, perhaps, but irreversibly. One acquires very valuable experience in political and ideological struggle against those who defame the party and the Armed Forces, those who attempt to undermine socialist spiritual values.

Officers in the political section recently studied how our primary party organizations are preparing for the elections for local soviets of people's deputies. Too early, you say? We are taking old errors into account. We are establishing working ties with local party and soviet organs. That is not always simple or easy. One sometimes hears statements like this: "We do not need token generals in the soviets." One can exhibit a pained expression, of course, and withdraw. But what does that accomplish? We need to convince the people that the time of the "honorary" deputies is past, that a military man can represent and defend the interests of the electors in a worthy manner.

Or take other methods from the restructuring arsenal. Previously, it was sometimes necessary almost to issue orders to go into the labor collectives and strengthen ties with them. No reminders are needed today. The fear of finding oneself under critical fire is passing. The custom of making eulogistic speeches, of depicting life in the army only in rosy colors, a custom from the times of stagnation, is disappearing. And one immediately has the feeling that people have greater trust in us military personnel.

We derived many useful and instructive things from the meeting between members of the political section and oblast ideological workers. I am confident that the arsenal of forms and methods of working in the masses will be perceptibly enlarged during the election campaigns for the local soviets. We are summarizing our experience with particular thoroughness today, after all, and are particularly receptive to the new and modern.

[Correspondents] It is probably not always easy to step forth and engage in an open dialogue with people based on principle.

[Gds Col G. Kozlyakovskiy, political worker from the Baltic Military District] Particularly in the situation of exacerbated international relations. And it is very important for those at the top to set an example. We have one. From 16:00 to 18:00 every Saturday, for example, by direct linkage to a telephone number reported in advance in the press, questions from workers, students, veterans, and members of the intelligentsia are answered by the district military commander, a member of the military council, the chief of the political directorate, the first deputy commanders and the chief of staff of the district. Or take the open-door days in the units. We started them, and what a lot of acute problems were immediately eliminated! When we began openly sharing our problems, how much concern we found in the public.

[Correspondents] Mikhail Ivanovich, the party regards ideological work as one of the most important areas of its work today. Logic would say that this work should be both prestigious and promising.

[Capt 2nd Rank M. Uvakin, lecturer with the political section of a Northern Fleet formation] The matter of prestige cannot be disputed. With respect to prospects in

the work of the propaganda cadres, however, in my opinion, not everything is in order in this area. We frequently assign the left-overs as propagandists. Unfortunately, officers who have failed at their previous jobs are sometimes assigned to this difficult and important job. We most frequently adhere to the concept that if an individual is a poor organizer he will "make it as a propagandist." There is no question about the political and moral deformities resulting from this approach.

I am very much troubled also by a certain stagnation in the cadres. The situation sometimes becomes paradoxical. An individual who fights for social justice and against stark wage-leveling for servicemen frequently finds himself in a fairly lamentable situation. Take just this one case. Capt 2nd Rank D. Zhebutovskiy, senior instructor for propaganda and agitation, works with me. He has served in this position 4 years, and his prospects for growth are zilch.

[Correspondents] It sometimes seems that ideological work would run like clockwork in the small team on a submarine, if anywhere at all. Is that the case?

[Uvakin] Not entirely. In the case of the submarine, every compartment has its own Agitator and News Sheet Editor. Each combat shift has its own party and Komsomol group organizer, an editorial board for its own wall newspaper. What a force, one would think. Of that impressive aktiv, however, only a few individuals at best actually work. The others are only listed. And it is not that they are shirkers. The combat carousel occupies everyone to the extent that there is not a minute left for assignments. At the end of watch, the personnel are totally exhausted from the stress. And so one wonders whether it makes any sense to have such a cumbersome but ineffective structure. Perhaps smaller but better would be better. For the sake of fairness I have to say that we do have the authority to reject obsolete procedures. But the first thing an inspector does upon arriving on the ship is demand the files of the Agitators.

[Correspondents] One frequently hears of timidity and lack of confidence which paralyze the initiative and activeness of the propagandists. Particularly when it pertains to "blank spots" in the history of the nation and the party and to socialism's potential compared with a different system of management. What could you tell us about this?

We addressed this question to Col B. Fomenko, candidate of historical sciences and docent, deputy chief of the Department of Marxism-Leninism at the Military Artillery Academy imeni M.I. Kalinin.

[Fomenko] I will say that he who has received fundamental theoretical training will not fear sticky questions. The problem is that our military schools do not provide this kind of training in the social disciplines. There are two causes of this, one might say. The youth arrive at the schools at that age when they simply cannot perceive and thoroughly comprehend these sciences. Their youthful mentality and lack of experience in life prevent it. In the second place, our teaching staff is not yet at the level required today by the restructuring.

Something is wrong when the majority of instructors are in their forties before they defend their dissertations.

Or take the instructor who was something of a universal scholar. He had read just about everything over a period of several years: scientific communism, political economy, philosophy, party-political work. Whatever he was haphazardly assigned to, that is what he did. We simply cannot treat the cadres this way, squander our intellectual potential, however.

In short, we need a fundamental restructuring of the entire system for teaching the social sciences at military educational institutions.

Deputy Main Military Procurator on Dedovshchina

90UM0041A Moscow KRASNAYA ZVEZDA in Russian 13 Oct 89 First Edition p 2

[Interview with Maj Gen Justice V. Parfenov, deputy main military procurator, by Capt 2nd Rank S. Turchenko: "The Law Against 'Dedovshchina"]

[Text] Maj Gen Justice V. Parfenov, deputy main military procurator, answers questions posed by a KRASNAYA ZVEZDA correspondent.

[Turchenko] Valeriyan Stepanovich, we are going to discuss not nonregulation relations in general but those which are a crime in the army and navy. What realistic possibilities do the military procurators have for combatting them? Do they have special subsections for this?

[Parfenov] Certain directorates of the Main Military Procuracy and military procuracy sections of the districts and fleets have agent-officers who specialize in the investigation of cases of nonregulation relations. It would be a problem to set up special subsections both for financial reasons and reasons of feasibility. There are very few crimes involving nonregulation relations alone, after all.

[Turchenko] But is it not precisely this kind of crime which seems to be singled out?

[Parfenov] The district military procurators summarize statistics on nonregulation relations and send them to the Main Military Procuracy. It has a special section which analyzes the data and detects trends.

[Turchenko] Could you statistically describe dedovshchina [abuse of underlings] in general?

[Parfenov] One can compare the figures for the first halves of 1988 and 1989. The number of crimes involving infractions of regulations governing relations dropped by 20%. Not only is this no cause for complacency, however; it should actually evoke serious concern that legal infractions detrimental to the combat readiness are being eliminated inadmissibly slowly.

[Turchenko] But what is the most troubling trend?

[Parfenov] In recent months nonregulation relations have been taking on an increasingly national aspect. In 1989, for example, there has not been a single case of nonregulation relations between soldiers of the same nationality (the exception: cases of mutual insulting and humiliation among servicemen of the Russian nationality).

[Turchenko] This trend was probably not so clearly manifested in 1988, was it?

[Parfenov] What can I say...? The army is a part of the people. What is manifested in the society also comes out in the army. National solidarity in most cases has a negative orientation, to be sure.

[Turchenko] Since this trend is coming out, then effective steps must be taken. Are they?

[Parfenov] Of course. The General Staff has begun monitoring the distribution of servicemen among the military units based on ethnicity....

[Turchenko] And what about steps by the Main Military Procuracy?

[Parfenov] Among other things, we are serving as the model for the dissemination of the experience of the Kiev Military District's military procuracy. The legal workers there are preparing publications explaining the laws and legal standards of conduct in the army. They call in translators, who record the text on magnetic tapes. The tapes are used in the work with fightingmen of various ethnic groups in the units and formations. In addition, we are now establishing contacts with Union republic newspapers in order to explain to the youth in their native language the Law on Criminal Liability for Military Crimes and other normative acts before the next call-up. We are also continuing to seek new methods of performing the work.

[Turchenko] There are obviously also other trends in barracks hooliganism. Are all of them covered by existing laws? Has the time not come to revise them?

[Parfenov] Let us first take a look at the Law on Criminal Liability for Military Crimes. Paragraph a, Article 8, states: infractions of regulations governing relations among servicemen in the absence of subordination between them and expressed in the infliction of blows or some other violence are punishable by imprisonment for up to 2 years. Paragraphs b and c of that article provide for more severe punishment for infractions of the regulations governing military relations under various aggravating circumstances.

It is not difficult to see that the law is worded with adequate precision.

With respect to revisions, it is my opinion that these are needed in only one area. It is with good reason that nonregulation relations are called barracks hooliganism. This conforms to their essence. Such crimes should be considered from the standpoint of Article 206 of the Criminal Code of the RSFSR on Hooliganism, augmenting it with more severe measures against group infractions of the law.

[Turchenko] Then one has to ask, since the law is a good one but is not restraining crimes, is something else interfering?

[Parfenov] A law, even the most perfect one, cannot eradicate a certain kind of crime in and of itself. The important thing is that it actually be applied. The level of public awareness and general culture... also play a role.

[Turchenko] Yes, but we need not anticipate rapid changes in this area. The well-known decree of the CPSU Central Committee set forth the task of eliminating nonregulation relations in the immediate future. What is preventing the resolution of the problem?

[Parfenov] A lack of legal sophistication and a mentality of noninterference—this is what is hampering us strategically. Frequently, when one asks a potential witness "Did you see the colleague humiliated with your own eyes? Tell me what happened," he answers "I didn't see it."

[Turchenko] All right. The difficulties involved in revealing crimes are clear. Judging from the editor's mail, however, the law is not very frequently applied even when criminal charges are involved. Here is a specific example. A total of 22 cases of nonregulation relations were revealed during the first 5 months of this year in the construction detachment commanded until recently by Lt Col Tsvetkov (Severovoyenmorstroy [Severodvinsk Naval Shipyard]). Criminal charges were made in two instances. When the case reached the court for consideration, however, it was reclassified and dismissed. And so, not one of the barracks hooligans bore criminal liability for beating and insulting colleagues.

[Parfenov] We have to return to the incorrect mental orientation of many servicemen. Cases ordinarily "fall apart" because both the witnesses and even the victims make certain statements during the investigation and then change their stories in the court. Here is a typical example. Private "X" ended up in a hospital, diagnosed as having a ruptured spleen. Criminal charges were filed. During the investigation "X" testified that he had been beaten by a superior. At the hearing in the military tribunal, however, he altered his testimony drastically, stating that he had fallen and struck a chair....

[Turchenko] Why was liability for perjury not applied in this case?

[Parfenov] Just try to prove when he was telling the truth and when he was lying.

[Turchenko] This is where the military procuracy's investigator should demonstrate his skill....

[Parfenov] Of course. But there is another aspect of the matter. In my opinion, both the courts and the investigators are frequently dominated by the testimony of defendants or witnesses. The objective truth is not always examined with adequate thoroughness and depth.

[Turchenko] Just what could motivate a victim to protect his offender?

[Parfenov] Many things.... The main one is the group mentality of not saying too much, not "informing." Then there is the vulnerability of the witness. After the trial he returns to the same military collective. In addition to the official group attitude, there is also another very complex attitude: Because of you, they will say, the man was given a term! And there are sometimes reprisals. Witness protection is a problem in general....

[Turchenko] Is it not possible to get the witness transferred to a different unit?

[Parfenov] Some procurators do this if the witness requests it. But we need to think about this problem. Particularly the General Staff.

[Turchenko] One of the causes of the ineffectiveness of the campaign against "dedovshchina" is the so-called coverup of infractions and crimes. The degrees of liability obviously need to be redefined, because the commander's liability for the number of infractions and crimes committed is immeasurably greater than his liability for covering them up, is it not?

[Parfenov] A cover-up of a crime by a commander is itself a crime. It is punishable under the article covering negligence of authority....

[Turchenko] Could you cite a case in which someone has been punished under the law for a cover-up?

[Parfenov] To be honest, I do not know of any....

[Turchenko] Then this article is ineffective in the case of "dedovshchina"?

[Parfenov] Probably so. And we military procurators need to give this some serious thought.

[Turchenko] A commander's attempts to stamp out "dedovshchina" sometimes even turn against him. Crudely put, the higher chiefs begin to "suppress" him. We need guarantees of the commander's legal protection in such situations. How can the procuracy affect the resolution of this matter?

[Parfenov] There are cases of this. As soon as we learn of them, we go to the district military council and defend the commander.

[Turchenko] But these are just individual cases. We need a legal protection mechanism, however.

[Parfenov] Several times we have submitted to the regulations section of the Main Staff of the Ground Forces a proposal for establishing a regulation standard prohibiting the punishment of commanders for the infractions of subordinates, with the exception of those cases in which the infractions resulted from the commander's inaction. We hope that they will ultimately listen to us.

[Turchenko] How do you feel about the fact that commanders with no legal training conduct inquests and decide whether criminal charges should be filed? [Parfenov] Military legal experts constantly instruct them and conduct assemblies for investigators. Ideally, of course, it would be beneficial for legal matters to be handled by professions. We are now raising the matter of setting up military procuracies at least in the divisions. If this is done, it will be an important step toward strengthening law and order in the units.

[Turchenko] And a final question. In general, what prospects do you see for the campaign against barracks hooliganism? Is it realistic to expect it to be eliminated within the next year or two?

[Parfenov] No one wants to appear the pessimist. But "dedovshchina" is rooted in our entire public life, even in the economy. That is a subject for another discussion, though. It is also true that a great deal depends upon the commanders, political workers and military legal experts. The law-enforcement agencies, among others, have an obligation to apply the force of the law for combatting "dedovshchina" far more effectively.

Glavpu Senior Inspector on Officer Corps Standard of Living

90UM0041B Moscow KRASNAYA ZVEZDA in Russian 14 Oct 89 First Edition p 3

[Interview with Maj Gen V.N. Kanarik, senior inspector in the Main Political Directorate of the Soviet Army and Navy, by Maj V. Zyubin, KRASNAYA ZVEZDA correspondent, under the rubric "Our Dialogs": The Poverty Line: It Now Goes to the Main Gates of the Military Posts"]

[Text] A group of officers and generals of the USSR Ministry of Defense recently made a study of the social circumstances of officers and their families at a number of garrisons.

The group was headed by Maj Gen V.N. Kanarik, senior inspector in the Main Political Directorate of the Soviet Army and Navy. He shares his impressions and thoughts here.

[Zyubin] At one meeting of the 2nd session of the USSR Supreme Soviet Lt Col N. Petrushenko, a people's deputy, said that he receives letters from lieutenants who refuse for their "little over 200" to protect the peaceful labor of Soviet cooperative members who earn 1,000 rubles or more per month by foul means or fair. Could you comment on this?

[Kanarik] In my opinion, emotion prevailed in the speech by the people's deputy. The activities of the cooperatives are not a simple matter, and we shall not discuss them merely in passing. With respect to the officers' attitude, however.... We protect not just the cooperatives. We protect the entire people. The homeland! Army and navy personnel, including officers who are prepared to fulfill their duty and do everything possible to secure the inviolability of our state and the peaceful labor of the Soviet people and to protect the restructuring.

[Zyubin] Then there are no problems?

[Kanarik] Let us talk about just that. I shall begin with what I consider to be the main thing.

An army is strong as long as it is loved by its people. An army is capable of accomplishing the most difficult missions, if its labor is properly appreciated, if the duty to shed its blood for the homeland is considered an honored right in the state. Unfortunately, these moral values have been thoroughly eroded in the society today. One can hardly count on good morale from a defender of the homeland when people spit after him and call him an occupier, and this has become almost an everyday occurrence in the republics of the Baltic region and the Transcaucasus today. When certain writers in the press try to cast doubt upon the need for the Armed Forces in general.

All of this creates a negative climate and, of course, affects the attitude of the personnel. There are other factors besides these.

One of them is the excessive workload in the service. In some units the officers are on duty 12-15 hours. They receive days-off once a month or even less frequently.

The officers are most dissatisfied with the fact that they cannot engage properly in the combat and political training, cannot give it their all. A very large amount of time is spent performing various administrative tasks, particularly in the reduced units. And then there is guard duty and other details. The interest of the criminal world and extremists in acquiring weapons is forcing us to take steps to guard them more securely. Some young officers therefore have 10-12 daily duty details per month. It is practically "one day regular duty, the next a detail," as they sometimes jokingly say in the army.

Is it any wonder then that 91% of all those surveyed stated that the wages do not conform to the physical strength, energy and time expended or the enormous mental tension? This is how the officers themselves assess their material situation: "Everything has grown more expensive, and I receive only 70 rubles per family member. Ours is not a life; it is torment." "We receive 253 rubles for a family of four. Not enough to live on. We live below the poverty line."

And so, figuratively speaking, the poverty line today has reached the main gates of the military posts. We visited the apartments of young officers. Those whose parents are not in a position to help them sometimes lack the most basic things. These officers live in poverty. Particularly those who do not have their own apartments. They also have to pay up to 100 rubles monthly for housing out of their far from lavish earnings. But that is not all. At most garrisons there are limited possibilities for the wives of officers to find jobs. This also affects the material circumstances of the families. There is not enough room at preschool facilities. Garrison "X" has one kindergarten with a capacity of 260 children, for example, while it needs several times that. And what about a move to a new

station? There is a popular saying, which makes sense: "Two moves is the equivalent of having all your possessions burn up."

All of this creates numerous difficulties. In the final analysis it leads to a decline in service zeal, to a desire on the part of some of the officers to leave the Armed Forces. Around 200 such requests were submitted in the Leningrad Military District, for example. Almost all of them were from young officers. I stress the fact that this figure is only the tip of the iceberg, if I may put it that way, of the discharge sentiments. Furthermore, these sentiments have touched the older officers as well. Many of them are restrained from taking this step only by their belief that things will not continue this way long, that there must be changes. The restructuring demands this.

Discharge sentiments have penetrated also into the midst of the cadets.

[Zyubin] Vasiliy Nikolayevich, could you tell us who made up the group established to study the social and living conditions of the officers and on what kind of data it based its conclusions?

[Kanarik] The group included representatives of the General Staff of the USSR Armed Forces, the Main Political Directorate of the Soviet Army and Navy, the Main Personnel Directorate, the Main Billeting Directorate, the Central Clothing, Food, Finance and a number of other directorates of the USSR Ministry of Defense.

Around 1,800 officers, 250 warrant officers, 300 wives of officers and warrant officers, more than 150 cadets... took part in group or individual discussions.

The group also checked out various aspects of the service, living conditions and personal services, the availability of medical, trade, laundry and bathing services.

[Zyubin] Contacts between the Ministry of Defense and the leaders of the armed forces in the capitalist nations are now being expanded. Has anyone studied the social circumstances of officers in those nations? What kind of moral and material support do they receive from the state? If you can, compare this with the corresponding data for our army.

[Kanarik] To my knowledge such a study has not been made. It can be concluded from well-known facts and figures, however, and from the personal impressions of members of our delegations that these comparisons do not favor us in many ways. Take all of the morale problems. The man in the uniform there enjoys great prestige and respect in the society. It is simply impermissible to insult him. This is not only condemned by public opinion but is also punishable by law. A large fine can be levied for such an act. Criminal charges can even be made. With respect to the material side of the matter.... The situation is approximately the following. An American soldier receives more than I, a general, receive. A junior officer in the U.S. Army receives more than our Minister of Defense....

[Zyubin] What steps are proposed?

[Kanarik] Proposals? Unfortunately, part of them essentially amount to "giving it to them," which is not entirely consistent with the economic situation today. There is no escaping it, however.

We must increase the pay scales for officers and establish monetary compensation for the rental of their housing and rewards for the results of their labor and for good performance of their service duties.

We need to establish a one-time payment equal to 5-7 times the pay scale for the completion of their service. Such payments already exist at a number of civilian enterprises. We need to accelerate the construction of hotel-type housing in the units. We consider it necessary to retain the pay rates for those officers who are forced to take lower-paid positions as a result of the reduction of the Armed Forces. And there are other proposals....

Incidentally, during our meetings with servicemen and their families we frequently heard complaints about the leaders of the Armed Forces, who allegedly show little concern for resolving acute problems of social and living conditions in the army and navy. It is difficult to dispute that point of view, of course, given the enormous housing shortage, the low standard of living of the servicemen.... I

would still like to say that it is not so, however. The leaders of the Ministry of Defense are making a considerable effort to increase the construction of housing and various cultural and personal service facilities, and to provide the personnel with the prescribed pay and allowances. There are not enough funds to resolve all these problems, however. Well substantiated proposals have already been submitted to the corresponding commissions of the USSR Supreme Soviet for allocating part of the funds freed as a result of the reduced defense outlays to meet the social and personal needs of the servicemen. We hope that when the budget for 1990 is approved the USSR Supreme Soviet will consider these proposals with understanding.

[Zyubin] There is a saying essentially to the effect that the nation which cannot feed its own army will be forced to feed the enemy's.

[Kanarik] True words. I would add: and respect and love its army.

It will be a pity if someone gets the impression that the general is using scare tactics and increasing tensions, which is not in keeping with the spirit of the times. The last thing I want to do is frighten our readers. Perhaps they have something to think about, however.

Causes of Slow Pace of Restructuring of Military Art

90UM0068A Moscow KRASNAYA ZVEZDA in Russian 25 Oct 89 First Edition p 2

[Article by Reserve Colonel V. Yaremko, candidate of military sciences, in the column: "The Rebirth of Tactics: A Point of View": "Who 'Sets' this Particular 'Fashion""?; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] What is being done to revive tactics? What obstacles stand in the way of progress? These questions have been discussed a number of times on the pages of KRASNAYA ZVEZDA throughout the present training year. Today we are continuing the discussion by presenting the readers with yet another view on why perestroyka is making slow progress in this area of military art.

As a man who has devoted many years of service to the area of tactics and later been involved with theoretical aspects of tactical problems for a considerable period of time, I do a great amount of thinking about the present state of tactics, about the lessons it has taught and prospects for its development as an art of waging combat.

The factors that led to the loss of the creative, thoughtful, and, I would say, inventive nature, have been idenfified and—to some extent—explored by the military press. I believe that there is a topic that has not been covered: the conjunctural approach to tactical problems of the scientific, or, to be more precise, quasi-scientific, apparatus. The fact is that during the stagnation years and previous to that, any statement made by persons in high office was "substantiated and confirmed scientifically." Any statement, whether it was made out of "intuition," arrogance, or voluntarism. Strangely enough, even here we are not protected by the sad lessons of the past. Our poor estimation of defense as a type of combat activity brought on tragic consequences during the first few years of the Great Patriotic War. Prewar scientific military thinking was confined to theoretical justification of directives emanating from above. I recall that a decision was made in the 1960s to do away with artillery and military aviation. Many scientists at that time also took that to be the "sole true, thoroughly reasoned, and scientifically based" measure dictated by the adoption of nuclear missiles.

It seems to me that the same "substantiations" still hold sway relative to the position and role of the types of combat activities: defense and offense. One is emphasized at the expense of the other. It is understandable that the realization of our defensive doctrine requires careful treatment of the practice of organizing and conducting defense, which in previous years has been pushed to the background. This approach is being looked at in new troop training programs and in the life of subunits and units. However, what is taking place with regard to scientific investigation of this problem?

In my view, the following example is instructive. From May of 1987—the time of announcement of the document

"Military Doctrine of the Warsaw Pact Member Countries"-to September of this year, VOYENNAYA MYSL, the major journal dealing with military theory, published 27 articles on the subject of defense, but only one on offense. Is this bias on the part of military researchers accidental? I think not. I believe that once more we have "substantiation" of the official directive. Once again, instead of creative development of the tactics of repelling possible aggression, what is served up is a rigid pattern: At first, the troops are to hold the defense, then carry out counterattacks and counterthrusts; only after proper conditions are created will they turn to the offensive. In the model of a future conflict is there no place for an alternative—one of organizing a meeting engagement? For a counteroffensive without first engaging in defensive combat? If not, how are we to revive and render tactics a creative activity? By substituting one scheme for another?

Stereotypes tend to live on. Nevertheless, we will not get rid of them and stop thinking in stereotypes if we continue to propagate previously approved directives. What can be said about an official recommendation such as: "In organizing the combat formation, place your strong forces in the first echelon", other than an attempt to foist a definite stereotype onto the commander or possibly keep him enslaved by dogma? Will the commander dare to act on his own?!

It seems to me that the nature of the problem and time required to renew tactics to bring it up to the level of a creative activity depend to a great extent on when scientific military thinking becomes free of the situation wherein its adherence to "substantiation" causes it to ignore a broad and diverse field of military practice.

A major role attaches to scientific and theoretical publications relative to maintaining a reliable interrelationship between theory and practice. The more they engage in innovation and avoid mediocrity, the richer the arsenal of the commander-practitioner; and the more effective the creative employment of these procedures under conditions of a particular tactical situation.

Restructuring of tactics is not a matter of one day or of a single individual. Included in the large circle of its most important problems is the level of the military school, which is destined to train a new kind of specialist. The present level of training, as shown by practice, lies far below the desirable. In my view, this is due to the fact that we approach the training of a specialist indiscriminately, without taking into account the details involved in the future officer's activity. The entire case is one of what ratios we are to set up in the military school, for example between basic and applied disciplines; and between theory, practice, and the personal aspects of education.

It is a fact that graduates of military command schools are usually assigned the position of platoon leader. They personally organize and carry out instruction. "Do as I do" is the fundamental principle of their work with subordinates. This means that the future lieutenant requires a method, a grasp of knowledge and skills that can enable him to fully apply this particular instruction technique to

his personnel. In other words, what is required is a practitioner, not a theoretician. Required is a commander who has completely mastered his regulation combat materiel and armaments, one who is faultless in carrying out his duties both in peacetime and in wartime. Hence, thinking logically, the military school should concentrate on the applied aspect of training. This is confirmed by the lieutenants who graduate: "In working with people, questions arise at every step. You try to find an answer by resorting to notes from the military school, looking for some guiding thought, a starting point, typical examples of practice, advice. Alas! You find nothing but theorizing, nothing definite."

The military academy is another matter. Its graduates are organizers of combat and political training in a unit or combined unit. This is the level at which they will lead the troops into combat. It is not ability to shoot and lead that is required of an officer of this caliber; rather, he must be able to organize combat activity of diverse personnel and weapons and exercise skill in managing them in combat. He will be required to resolve practical tasks involving a large volume of knowledge in various areas of military art. This is where theoretical training comes to the fore; it constitutes the basis underlying successful activity. For this reason, in the academy it is necessary to stress not

narrow training, but fundamental, theoretical, and methodological-organizational education.

I am of the opinion that creative development of tactics will also be enhanced by reevaluating the literature dealing with methods of offering instruction in operational-tactical disciplines. The latter should treat combat as no less than an armed contest between opposing sides. Some texts create in the reader the impression that only one side is waging combat. I believe that the viewpoints and nature of actions of a probable enemy should be considered and studied in the light of dialectical unity with actions of friendly subunits and units. Tactics can only benefit from this!

The same may be said about experiences gained in wars and armed conflicts. For example, why are the history of wars and the history of military art studied separately and modern tactics studied separately? We must integrate the study of these disciplines. This will undoubtedly have an effect on the operational and tactical readiness of students.

I believe that all this can not only promote the rebirth of tactics as the art of organizing and conducting combat, but can also contribute to the rebirth in military science of a truly scientific methodology, a Leninist concept of examining the aspects of armed struggle.

Participants in Ministry of Defense 'Open Line' 90UM0056C Moscow KOMSOMOLSKAYA PRAVDA in Russian 21 Sep 89 p 4

[Unattributed article: "Ministry of Defense Makes Itself Available"; first paragraph is KOMSOMOLSKAYA PRAVDA introduction]

[Text] We remind our readers that the Open Line is set up to operate from 1200 to 1700 hours Moscow time on 23 September. The telephone numbers are 257-55-73 for Moscow residents and 257-55-92 for persons residing elsewhere. Telegrams may be sent to: Moscow, 748, ulitsa Pravda, 24, Pryamaya Liniya, Komsomolka.

The following persons will be available on the Open Line. A comment by each follows the name and title.

Gennadiy Aleksandrovich Stefanovskiy, Colonel General, deputy chief, Main Political Directorate of the Soviet Army and Navy: For most of my career I have been involved with Komsomol work. All of my practical activity is associated with educating young people, in whom I have found and am finding friends and persons of like mind.

Norad Grigoryevich Ter-Grigoryants, Lieutenant General, deputy chief, Main Staff, Ground Forces: National military units? What kind? Cavalry? In the modern motorized rifle division soldiers are serving in several hundred military specialties. Is any republic capable of providing such training? I doubt it.

Aleksey Tikhonovich Klimov, Lieutenant General, chief of staff, Rear Services, USSR Armed Forces: Rear service officers are thieves? I take such an accusation as an insult. Especially now, when we must provide the troops with necessary supplies while trying to retain officers in service and observe general economic accountability.

Vladimir Mikhaylovich Manik, Colonel of Medical Service, deputy chief, Medical Prophylactic Agency, Central Military Medical Directorate, USSR Ministry of Defense: Nothing was said for a long time about the fact that 60 percent of deaths in the Army are attributable to personal neglect and lack of discipline. What should we stress in therapy: the body or the mind?

Nikolay Ilich Yermilov, Colonel, department chief, Moscow City Military Commissariat: I am higly disturbed over the present contingent of draftees. Out of 100 young men in Moscow upper secondary school classes, 60 are afflicted with various diseases, and 40 cannot complete the elementary GTO [Ready for Labor and Defense] program.

The following persons will also be available:

Vice Admiral Dmitriy Mikhaylovich Komarov, Main Staff, Navy.

Lieutenant General Anatoliy Dmitriyevich Sidorov and Major General Igor Petrovich Malakhov, Main Personnel Directorate.

Major General Vitaliy Mikhaylovich Nikitin, General Staff.

Colonel Anatoliy Ivanovich Ulyanchuk, Central Finance Directorate.

Colonel Mikhail Grigoryevich Matakin, Legal Services, USSR Ministry of Defense.

Colonel Leonid Alekseyevich Smertin, Main Military Procuracy.

Colonel Anatoliy Ivanovich Drozhzhin, Moscow Oblast Military Commissariat.

Colonel Igor Yevgenyevich Yefimov and Colonel Aleksandr Alekseyevich Kokhorin, Main Political Directorate.

Col Gen Gromov Addresses Officers' Conference 90UM0032A Moscow KRASNAYA ZVEZDA in Russian 7 Oct 89 First Edition p 1

[Unattributed TASS article: "Officers' Delegate Conference"]

[Text] Kiev Military District, 5 October. (TASS Correspondent). The state of perestroyka and activities for deepening perestroyka in work with officer personnel, improvement of officer personnel selection, placement, training, and education in light of the demands of the CPSU Central Committee, USSR Minister of Defense, and the chief of the Main Political Directorate of the Soviet Army and Navy—this is the agenda of the first Officers' Delegate District Conference which took place today at the District Officers' Club.

Colonel General B. Gromov, military district commander and Hero of the Soviet Union, delivered a report. He noted that units are forming officers' conference soviets which are called upon to play an important role in increasing the activities and responsibilities of officer personnel to fulfill their military duty and increase the prestige and respect of the title of Soviet officer. This process is being conducted along with universal attempts to establish a new moral atmosphere, democracy, and self-criticism in the assessment of attained results in military collectives.

Furthermore, it was emphasized in the report and in speeches that one still meets individual cases of pessimism and a lackadaiscal attitude toward service among officers. Many of the conference participants listed lack of social protection for servicemen, inadequate material and living conditions, and omissions in the organization of military exchanges and medical care as causes of reduced prestige for service in the Army.

The Officers' conference, noted those gathered, must become a reliable support for commanders and chiefs to cultivate a feeling of dignity and a readiness to stand in defense of the character of an officer.

Officials of the Ukrainian CP Central Committee and of Party Obkoms on whose territory the district is located took part in the work.

Chief of Finance Directorate on Pensions, Benefits

90UM0032B Moscow KRASNAYA ZVEZDA in Russian 7 Oct 89 First Edition p 2

[Interview with Major General N. Bay, deputy chief of the Central Finance Directorate of the USSR Ministry of Defense by Major I. Ivanyuk: "Pensions Today and Tomorrow"]

[Text] Major General N. Bay, deputy chief of the Central Finance Directorate of the USSR Ministry of Defense, answers KRASNAYA ZVEZDA's questions.

[Ivanyuk] Nikolay Maksimovich, right now when a new Law on Workers Pension Insurance is being prepared in the country, many of our readers are troubled by the question of whether the system for granting and paying pensions to servicemen will change? Authors of letters discuss the contradictions which the current law has and its breach of social justice.

[Bay] Well, it is impossible not to see the problems that exist here. As you know, the USSR Ministry of Defense grants a serviceman the right to a pension by virtue of not less than 20 years of service calculated on a calendar year system and counting individual periods of service under favorable conditions. An officer who reaches 50 years of age and who has served not less than 12.5 years can enjoy this right if he has a total length of work service, including his service time, of not less than 25 years. In a number of cases, the pensions of officers, warrant officers, naval warrant officers, and career servicemen who are discharged from the Armed Forces into the reserve or are retired do not turn out to be so high. For example, a senior officer's average pension is 128 rubles 6 kopeks for serving from 20 to 25 years and a junior officer's average pension is 107 rubles, 34 kopeks. Warrant officers and naval warrant officers accordingly receive still less. There are tens of thousands of such people.

Right now, a number of benefits have been established for the listed categories of servicemen who were discharged in connection with Armed Forces reductions and the USSR Council of Ministers resolution of March 13, 1989. First, the right to a pension by virtue of 20 years service or more is extended to them regardless of the serviceman's age on his discharge date. Second, the size of pensions has been increased: For 20 years service—by 40 percent, for each subsequent year of service—by three percent of the pay rate's monetary content but not more than 50 percent of the pay rate altogether. The size of pensions have also been increased taking into account the civilian work record. The proposals contained in letters sent to both KRASNAYA ZVEZDA and to the Central Finance Directorate are well grounded and necessary and this system will extend to all servicemen including those previously discharged. We also need to review the pensions granted to officers, warrant officers, naval warrant officers, and career servicemen who served a complete career (25 years or more).

Of the other contradictions, I would single out the existing dual limitation on the size of pensions both in percentages of pay rates and in absolute sums. It was established over 30 years ago but it is still being applied today. Furthermore, in my view, unwarranted [pension] leveling is becoming firmly established: People who filled quite unequal positions in the Army or Navy but who have equal length of service, let us say, 25 or 45 years, often receive identical pensions.

We have developed a draft of a new law on pension insurance for servicemen and members of their families and have presented it to the government. It provides for improvement of the material position of pensioners and also establishes sizes of pensions to be granted that are greatly dependent on the work contribution, service conditions, and other factors of each serviceman.

[Ivanyuk] Reserve officers A. Sizov, V. Shalakhov, Serviceman A. Brovkin's wife, and other readers of ours direct attention to the distinctive feature of servicemen's families that often require two to live on one pension—many officers and warrant officers wives do not have time to accumulate the [required] length of work service due to a lack of working positions in military villages. This also must affect the standard of living. And families who lose their breadwinner find themselves in a particularly complicated situation.

[Bay] I must say that this situation has been rectified to a significant degree. In accordance with the USSR Council of Ministers resolution signed on August 21, 1989, the time that wives of officers, warrant officers, naval warrant officers, and servicemen who reside with their husbands in locations where there are no job specialty placement opportunities is included in their total length of work service required to be granted an old age pension. Obviously, this will be applied in those cases when they have reached pension age and do not have the required length of work service. According to the system established, this added time period cannot exceed ten years.

As for currently existing minimum pensions for families of servicemen who have lost their breadwinners, they are significantly below the subsistence minimum. Thus the low pension ceiling for each disabled family member of a serviceman who died at the front or while fulfilling other duties of military service totals 55 rubles per month, and the minimal pension for families of servicemen who died from various diseases totals 50 rubles per month for one disabled family member, 72 rubles for two, and 102 rubles for three or more. The minimum pension for parents and wives of servicemen who have died since October 1, 1989 has been set at 70 rubles per month.

There is a similar situation with maximum sizes of pensions. For example, the pension for the family of a captain who died while fulfilling his military duty in any case cannot exceed 150 rubles. And he could possibly leave children or disabled parents. We provided for an increase in pensions in the event of loss of the breadwinner in the draft law on servicemen's pension insurance that will be submitted to the USSR Supreme Soviet for review.

I would like to hope that the people's deputies will also concur with our proposals to increase service pensions and

also disability pensions for participants of all wars including servicemen who served in the army in the field.

[Ivanyuk] There are a large number of questions addressed to the editors which are associated with salaries of working pensioners. Perhaps Reserve Naval Warrant Officer V. Khmarin most prominently outlined the problems in his letter. "I have a total of 18 calendar years of service," he writes, "and 33 years for calculating benefits. I can earn no more than 300 rubles per month including my pension, that is, only 150 rubles as a worker or 130 rubles as an employee. In contrast to civilian pensioners who have grown children, I have three small children. I pay 50 rubles for an apartment. My wife just found a job and she earns 120 rubles. We are catastrophically short of money. And the fact that I cannot earn [more] due to the existing 'ceiling' is particularly distressing."

[Bay] I want to remind you that pensioners from among servicemen are in a more favorable position in contrast to those who receive pensions through social insurance agencies. According to the general rule, age pensions for working pensioners are paid at a size so that the pension and salary combined do not exceed 150 rubles per month. Practically in the majority of situations this means that, having found a job, a person stops receiving an age pension. Exceptions are made only for those who work in the occupations of laborer, skilled craftsman, construction superintendent, middle and junior medical personnel, personnel of public health institutions, and certain others.

Furthermore, there are quite a few instances when, in accordance with the law, service pensions are paid without regard to salaries. Thus, no "ceiling" exists for retired reserve officers who fill positions as military leaders at middle general education schools, special middle educational institutions, or professional technical system institutions. This same system is extended to a number of servicemen pensioners who are permanently working as laborers at sovkhozes, at poultry factories, or at other state agricultural enterprises.

Incomes of members of production and other cooperatives and income from individual labor activities are not taken into account when paying pensions. All types of monetary bonuses, incentive awards of a one-time nature, and the cost of uniforms and food which are provided free of charge to workers of the appropriate professions, and certain other income are not included in salary totals taken into account when paying pensions. Since January 1989, full size pensions have been paid to pensioners working as laborers or skilled craftsmen at enterprises and organizations located in Moscow without taking salaries into account.

As you know, in accordance with the law adopted by the USSR Supreme Soviet on August 1 1989, beginning on 1 January 1990 this right to obtain a full size pension will be extended to all pensioners working as laborers or skilled craftsmen regardless of residence or work location and also to all pensioners who receive disability pensions.

Dissatisfaction With Training of New Junior Officers

90UM0037A Moscow KRASNAYA ZVEZDA in Russian 12 Oct 89

[Article by Lt Col I. Lelin, "If Without Nursemaids, or Who Trains Lieutenants and How?"]

[Text] The personnel of the regiment are on the parade ground, and before them, in their new parade uniforms, military-school graduates newly arrived in the unit. As is the custom, congratulatory words resound on the occasion of the lieutenants' assuming their first jobs as officers. I sense the elation, but cannot stifle my "purely" prosaic thoughts, not wholly in keeping with the solemnity of the occasion: which of these lieutenants will quickly be assimilated in their positions, and which will we have to keep tinkering with, backing them up at every step?

Alas, these thoughts are not unjustified. Every year, after the arrival of the new generation of officers in the regiment, we are confronted by the problem: how can we insert them in the combat formation quickly? We mobilize all available forces—the best subunit commanders, political workers, party and komsomol activists. But by no means do these measures always bring the desired results. Of course it is sometimes our fault, but nevertheless, the main reasons lie in the lieutenants themselves, more precisely in defects in their professional training, in their inability to work with the men. Sometimes—and with every year there are more such cases—it is an everyday disinclination to work.

Here is an example. Lt. S. Korablik, a graduate of the Moscow Higher Combined-Arms Command School, still had not found his place in the regiment after a year of service. From the professional aspect he was poorly trained, he could scarcely be allowed on the firing line or the obstacle course, and could not conduct a class of any benefit. In short, a hopeless case. Passive and inert toward everything. Naturally, Korablik's men were not glittering successes in their work either.

Is it possible that the officer was not met with understanding in the collective, that it failed to help him learn his job, to acquire the experience needed for confident work? Not at all. They watched over him at first, and helped him as much as they did his peers. The problem lay in the man himself; there are opportunities in every subunit to reveal one's capacities, to use one's knowledge and skills.

The start of officer's service promised to be difficult for Lt A. Drupov, a graduate of the Leningrad Higher Combined-Arms Command School. He assumed command of a motorized rifle platoon that was by no means rated highly. But it became one of the best within just a half year. The lieutenant was able to gain experience and correct the sins of his predecessor. This was because he knows his job, and relates to it with enthusiasm and relish!. If an innovation appears in the methods of training sergeants and soldiers, if he spots some unusual pedagogic trick of a senior

comrade, at once he tries to use them in his practical work. In the company where Drupov serves, there are lieutenants with more time in service than himself, but when the subunit commander is absent, he leaves the former in his place. And they all see this as appropriate: the officer is fully worthy.

Unfortunately, in recent years fewer and fewer lieutenants like Drupov are arriving from the schools. We run across graduates of the Lt. Korablik type much more often. And battalion and company commanders can do nothing but lead them by the hand, give advice on every occasion, suggest, even assume some of the functions of their lieutenants. Strange as it may seen, a great many VUZ graduates lack the most elementary knowledge and skills, and without them their efforts result in low-value classes.

The officers in our unit have a very skeptical opinion of alumni from the Baku Higher Combined-Arms Command School. Perhaps the regiment has simply been unlucky with graduates of this school, but those who are assigned to us have no inkling of Army work and its demands. Even when it comes to knowledge of regulations, drill and physical training, some of them are inferior to the junior commanders. One of the graduates of the Baku School, Sr Lt M. Gasanov, has served in the regiment for three years. Before that he served in another unit. And both there and here, he has never stood out except in negative terms. How much effort and time has been spent on him, nerves too, and the result has been almost nil. He has not become a commander. Now he is being discharged from the Armed Forces. Command development of a number of other graduates of this school has also dragged on for an unconscionably long time.

I repeat, the fault might be ours as well. But in a combat unit, do we really have to teach lieutenants what they were supposed to cover in school—knowledge of regulations, the ability to execute drill movements, good physical development?

The Moscow Higher Combined-Arms Command School has a much better reputation. The oldest VUZ in the country, it has excellent traditions. But in recent years, obvious rejects have been coming from this school too sometimes. I already mentioned Lt S. Korablik. Another graduate of this school is Lt D. Malchenko, who recently submitted a request to be discharged to the reserves. The man was disappointed in the service. And one of the main reasons was his poor professional training. This is not surprising—after all, if one thing doesn't come, the second won't, you have no idea how to approach the third, with time you lose all desire to work, and service becomes burdensome. I have the impression that this fact is not considered in certain VUZ'. The results of this view have become too tangible: they think, no matter what you do, you can't teach the future officer everything in the VUZthat's what service is for, to make up what's missing. I heard something of this sort when talking with a teacher who came to our unit with a group of temporary-duty cadets:

"What are you always complaining to us for? Training will always be training. With time the lieutenants will get experience too, and everything else they need to work with the men."

Well, that's true enough. Only, when will they get it? Meanwhile the lieutenant has to command his platoon today, and perform combat training tasks. You understand, combat doesn't make any allowances for youth. And it's possible a "nursemaid" won't be nearby. That's why he has to be trained thoroughly.

But do we, the unit commanders, perhaps want too much from the VUZ, are our demands too high? Absolutely not. There are schools whose graduates we always await with high hopes and expectations. One of them is the Leningrad Higher Combined Arms... Now that's a school whose alumni are always well trained in all respects. And the majority are promoted in service after two or three years.

So it is possible to train officers as is required today. If, of course, you don't expect that someone else is going to bring them up to speed anyway, and correct all their school-related problems.

I have no intention of making recommendations to VUZ teachers on what they should do, or how they should do it; it is more clear to them on the site. I am confiding sore points, those things that are increasingly worrying and alarming us. I hope that these alarms will find a response in some, that somehow they will be transformed into specific actions.

An officer must be a pedagogue. If yesterday these words were just a slogan, today they are becoming a real necessity. But among the graduates, how few officers there are who have what it takes to made a pedagogue and educator—tact, culture, politeness, a sense of empathy. You look at one lieutenant and you wonder where the young man could have gotten so much arrogance, coarseness, swagger, and disdain for the opinion of his subordinate. At school? From military school? Probably. And the result is a great moral loss, but not only moral. Combat training and service suffer. You see, it's hard to count on even the slightest success in the platoon if the platoon leader himself sets the example in coarseness and cultural deficiency.

We have long approached the evaluation of VUZ graduates primarily with a single criterion—the level of their military professionalism. And indeed, this criterion (let's be frank!) was not very great at all. Now the times demand different measurements. And the graduate's store of knowledge should be more weighty that even two or three years ago. With a much more solid set of values needed by every officer—command, moral, and teaching values. It is simply impossible to begin officer service without them.

Military District Consolidation Increases Transport Problems

90UM0087A Moscow KRASNAYA ZVEZDA in Russian 15 Oct 89 First Edition p 2

[Article by Lt Col V. Astafyev, under the rubric "Photographic Report": "The Military Communications Service"]

[Text] How do we regard the military communications service? If we were able to get a ticket on the train or aircraft, then it is functioning well. If not, we vent our ire on it. But what do we know about it?

Col A. Sologubov, chief of the Directorate of Military Air Travel of the Uzbek Civil Aviation Directorate, told about a letter in which a front-line soldier complained that the duty officer at the Aeroflot agency had not been able to send his relatives off rapidly. What epithets he leveled at the lieutenant!

Many such letter are written, and that opinion is a tenacious one. It is probably because many people base their opinion of this service precisely on the availability of tickets.

"But our main task is to provide military hauls," said Col N. Nevilko, chief of the VOSO [Military Communications Service] of the Turkestan Military District. "The daily plan for rail transport, for example, amounts to around 100 cars. We handle the movement, the loading and unloading of approximately 60-70 trains per month. The load doubles during the harvest season. In addition, we haul draftees, soldiers discharged into the reserve and the traffic control and regulation service, and perform many other jobs.

The work of the VOSO agencies has been made more difficult by the consolidation of the Turkestan and Central Asian military districts. The length of the rail lines has been extended and the number of flights increased. We could see that the officers employed in military communications do not have an easy job. Because of manning shortages the officers have alert duty every other day almost year-round. Instead of berating the lieutenant sitting behind the glass window, let us think again about what we know about his work.

Experiment with Short-Term Leave for Draftees

90UM0056A Moscow KRASNAYA ZVEZDA in Russian 19 Oct 89 First Edition p 1

[Article by KRASNAYA ZVEZDA correspondent Lt Col A. Oliynik: "Soldiers Take Leave According to Schedule"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] Guards Motorized Rifle Taman Division imeni M. I. Kalinin is experimenting with granting leave to all draftees on the basis of a schedule. Presented below are comments expressed by those involved on the success of the experiment during a visit by Lieutenant Colonel A. Oliynik, our correspondent.

[Division Commander Guards Colonel V. Marchenkov] We started the experiment a year ago on the initiative of the combined unit's political section. It is necessary to seek forms and methods of educational work that can motivate draftees to carry out their constitutional duty in a conscientious manner. That is the primary goal of our experiment. The concept was approved by the district Military Council and the Political Directorate.

I must say that the experiment has had a remarkable effect on morale, in some units bringing about a radical improvement. Let me cite an example. In a motorized rifle regiment in which Guards Lieutenant Colonel B. Beznosikov serves, about 800 men have taken leave since the first of the year. The regiment continued to carry out its combat training tasks. There have been no serious violations of military discipline, especially absence without official leave. Violations of military discipline have been halved in comparison with previous years. We had many cases in the past when men could not resist the desire to see their parents or girl friend and would "take off on their own." That no longer is the case. We have already decided, before completion of the experiment, that this leave policy should be extended to as many troops as possible.

[Guards Senior Lieutenant A. Rudnitskiy, motorized rifle company commander] When we were told that our company was to participate in the experiment, the platoon leaders and I were less than enthusiastic about it, thinking that it was merely another requirement levied on us. The granting of short-term leave was considered to be a very rare and very effective form of motivation—one that influences service success of a soldier. All of a sudden, all were to be offered leave without exception. What kind of control were we to impose so that a soldier's absence would not render an adverse effect on the company's combat readiness? What would be the attitude of men who had already been on leave if we were to adopt this seemingly indiscriminate leave policy? Many questions were raised.

[KRASNAYA ZVEZDA] How is the company presently handling these problems?

[Rudnitskiy] Every man is granted his short-term leave on the basis of a schedule, which incidentally is posted for the entire company to see. It is made up for the training year, with due consideration of the combat and political training plan. In this connection, we try to arrange it so that the enlisted man or NCO will arrive home for his birthday, parents' anniversary, or the harvest season. We also take the soldier's wishes into account if we can.

For example, at the present time there are three men on leave. More than 70 percent of the company's draftees have made a visit home. Just the other day, Guards Private Ivashin went home for a second time. In my opinion, he had a valid reason to go home again: a new daughter. The company collective decided that they should let him go on leave as a way to promote his morale. I supported that decision, of course. A schedule is a schedule, but motivation is motivation.

Incidentally, let me say something about the social aspect. When a man applies for leave on the basis of the schedule, his request is considered at an open Komsomol meeting. If the majority vote "yes," I see to it that his leave document is ready on time.

This leave policy enabled us to accomplish several goals at the same time: heightening the soldier's interest in conscientious labor; improving the effectiveness of Komsomol meetings (You should see how active and no longer unenthusiastic they are in the company!); and, mainly, having each man see for himself that the Army collective treats him with understanding.

[KRASNAYA ZVEZDA] What do you do in the case of men who have committed serious violations?

[Rudnitskiy] We let them take leave when their turn comes up. However, once more the collective has the final word. Everyone knows everyone else in the company. If necessary, we give offenders an opportunity to straighten out.

I have something special to say about leave for squad and team leaders and others of that category. We have set down this rule: We grant leave to an NCO only when my deputies and I are certain that the sergeant's absence will not have an adverse effect on the squad's combat readiness. This condition, in turn, induces NCO's to be more demanding of their subordinates and insure a suitable replacement.

[Guards Sergeant L. Pogorelov, squad leader] I have already taken leave twice. The first time was in February of this year, immediately after I returned from Afghanistan; the second time was in the beginning of June, on the occasion of my wife Larisa's birthday. I must say that a leave refreshes a person, rendering him more fit to serve.

[KRASNAYA ZVEZDA] Have there been any cases of soldiers returning late from leave?

[Pogorelov] The ones that did so had a valid reason. In such a case, under the condition of the experiment, if the lateness amounts to 24 hours or more, we set the man's leave date back one week or more. For this reason, everyone is eager to return to the unit on time.

Editors: Thus, the experiment, as described by the organizers and participants, is a success. What are our readers' opinions on the experiment?

Defense Budget Shares, Shortage of Military Economists

90UM0056B Moscow KRASNAYA ZVEZDA in Russian 19 Oct 89 First Edition p 2

[Article by Col. S. Vikulov, chief, Department of Armed Forces Economics, Military Finance and Economics Faculty at the Moscow Finance Institute, doctor of economic sciences, in the column: "Problems and Deliberations": "Where Are They—Economists in Uniform?"]

[Text] It took us decades of arguments and experiments to arrive at the realization that economic management methods should prevail in the national economy. However, it is unfortunate that the old approaches still dominate in the military area. For many years, a kind of noneconomic way of thinking guided our military cadre, who make no attempt—indeed they do not know how—to count the people's money.

The military economist-finance specialist's training is presently geared to the troop level of activity, although the latter's share in total defense expenditures amounts to only 25 percent. However, purchases of armaments and equipment, scientific research, and experimental design work account for more than 60 percent. In this connection, in the USSR Ministry of Defense the evaluation, analysis and supervision of pricing of military products are the responsibility of a small number of customer representative collectives. Good specialists as a rule as far as their area of technology is concerned, they are mere novices with respect to economics. Only a few of them take short courses, at best.

Let us draw a simple comparison. If it were possible to reduce total expenditures by one percent by improving the qualifications of specialists involved with mediating the prices of military products, the savings would be sufficient to support at least 20,000 engineer-economists. Equally effective would be detailed and qualified military economic analysis and expertise applied to estimating experimental design projects of industry, since there is much more uncertainty in pilot production than in series production.

Then there are the attendant problems of training cadre for military scientific research institutions involved with technical and economic analysis of prospective weapon models and systems. Our estimates indicate that 75 percent of all the possibilities for lowering the overall cost of a program lie in the developmental phase of a particular equipment model. In the logic of the argument, this is where the major effort of military economists should be concentrated.

Also lacking is economic and financial knowledge on the part of officers serving in main and central directorates, industrial enterprises and construction organizations of the Ministry of Defense, which number in the hundreds. I estimate that the cost of the resulting losses is considerably greater than that which would be required to train them. All the more since the costs of training in economics would not be particularly high, even if instruction were offerred in regular, established schools. According to data compiled by the USSR Ministry of Defense Main Personnel Directorate, it costs the government 10,000 rubles a year to educate an officer in a combined-arms school; many times that in an aviation school. To train an officer in our faculty, the cost does not exceed 7,000 rubles a year.

It must be realized that a large number of command cadre serving in line units possess neither the proper training nor the skills required to think in economic terms. The fact is that funds amounting to many millions are concentrated in the hands of unit and large unit commanders. At the troop level there is no, shall we say, main economist's service; there is merely the finance service, which is involved with providing the troops with funds.

In conversations with many line officers, I became convinced that most of them do not fully realize that each shot fired from a personal weapon may cost a kopek; from an artillery piece, tens of rubles; but the launch of a strategic missile may be as much as several million rubles. Is it not important for a commander to know that the cost of conducting training exercises for a company or batallion runs in the tens of thousands of rubles, while for a regiment it jumps to hundreds of thousands of rubles? A commander's activity should be evaluated with respect to effectiveness of resource use, something with which no one will disagree. However, all of this must be taught to officer cadre so that they can learn to think in economic terms.

It is no longer a secret that the Americans are not the only ones selling weapons to foreign countries. Nevertheless, if we also engage in this activity, we must extract the maximum economic advantage from this trade. However, who is to train cadre of these specialists, and where is this to be done?

All military VUZ's are involved with rewriting their education plans and programs. I believe that this is where we should focus our attention, with emphasis on strenthening economic training of command and engineering cadre. The education plan usually allots a minimum amount of time to disciplines that deal with military economics and finance, operating on the remainder principle. The time has come to put an end to this practice. The situation in the country and the Armed Forces is serious enough to warrant raising the question of extending the training period of officer cadre for the purpose of effecting improvement in their economic knowledgeability.

Equally important is the problem of producing professional military economists. There is an urgent need to setting up a department to train engineer-economists, configured after a military finance and economics faculty.

Also required is the design of courses to instruct line commanders in economics before they take up their positions of leadership in units, combined units and large strategic formations.

Finally, there is a need for thorough scientific studies dealing with improving the economic mechanism of the entire military economy. Short of that, it will be simply impossible to restructure the Army and Navy to reduce defense expenditures.

GROUND FORCES

CEP Error from Measurement of Fuel Temperature in Tactical Missiles

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[Editorial Report] Moscow KRASNAYA ZVEZDA publishes in Russian in the 6 October 1989 first edition

Divisional Commander Decorated for 1988 Afghanistan Action

90UM0087B Moscow KRASNAYA ZVEZDA in Russian 2 Nov 89 First Edition p 1

[Ukase of the Presidium of the USSR Supreme Soviet and commentary by Lt Col S. Kalinayev]

[Text] For the successful performance of his mission of providing international assistance to the Republic of Afghanistan and for courage demonstrated in the process Colonel Vladimir Vasilyevich Andreyev is awarded the Order of Lenin.

> M. Gorbachev, Chairman of the USSR Supreme Soviet Moscow, the Kremlin 31 October 1989

The Divisional Commander's Valor

The homeland has decorated Lt Col Vladimir Vasilyevich Andreyev with its highest award, the Order of Lenin.

At first glance the divisional commander's valor and courage might not appear as brilliant and significant as that of the people right on the firing line. It is his decisiveness, precision and perspicacity in issuing orders, however and his ability to predict the development of the situation which organize the personnel, shape them into a unified striking force and ultimately lead to victory.

This is the way it was on Afghan soil on 28 October 1988. Competently assessing the situation during combat operations, Col Andreyev made the only correct choice, unexpectedly sending an armored group around the enemy, who was stunned by the daring maneuver. More than 200 rebels, 27 weapon positions, 8 large-caliber machine guns, 10 mortars, 13 ASW hand grenades and a lot of other combat equipment were destroyed in the battle.

This is only one episode in Col Andreyev's combat career. He has many like it to his credit.

The officer's talant as a commander—and this must be pointet out—is organically combined with concern for his subordinates and a striving to preserve human lives. This is indicated by the fact that in January and February of 1989 the division commanded by Andreyev entered the territory of the USSR without losses of personnel or combat equipment.

Vladimir Vasilyevich is 40 years old. He was born in Kursk. He refined his skills as an officer at the Military Academy imeni M.V. Frunze. He has been awarded the Order of the Red Banner and two Orders of the Red Star.

a page 1 article entitled: "Among Military Calibration Specialists". The article notes in passing that an error in the measurement of the fuel temperature of several tactical missiles can lead to "errors in firing" of a hundred meters and more.

Interview With Chief of Naval Finance Service

90UM0020A Moscow KRASNAYA ZVEZDA in Russian 3 Oct 89 First Edition p 1

[Interview with Maj Gen V. Belov, chief of the Naval Finance Service, by Capt 3rd Rank Yu. Gladkevich, under the rubric "A Topical Interview": "Oppressed by the Paragraph"]

[Text] Nowhere is the commander's independence as restricted as in the area of finance and management. Nowhere else is the sole commander so rigidly dependent on all-powerful paragraphs in the instructions, which dispassionately state what "is allowed" and what is "not allowed," allocate every little trifle, down to the most insignificant, kopeck outlay.... This is the general mood expressed in letters and oral responses from commanders of ships and formations discussing problems of financial and management work. I therefore began my interview with Maj Gen V. Belov, chief of the Naval Finance Service, with this question:

[Gladkevich] Viktor Aleksandrovich, what do you regard as the main cause of what we can candidly say is not a very thrilled attitude toward finance and management work by commanders?

[Belov] I believe that we should discuss not one but at least two causes. In the first place, this aspect of the commander's work is indeed regulated down to the petty details, and the commander's independence is excessively restricted. In the second place, there is no denying the fact that many commanders sometimes have a poor grasp of financial matters. These factors taken together naturally turn the finance and management work into a burden for them.

[Gladkevich] Our readers have another question about this. Many of them ask whether it would not be possible to abandon entirely the existing practice by which financial documents dictate to the commanders the specific price at which they can order something for the combat training, and when. After all, managers of civilian enterprises have the authority to determine on their own how to spend the money....

[Belov] The enterprise, as we know, earns the money itself and itself determines how much money to spend and on what. We military people are under the state budget, however. The norms (and they must be well based) therefore should be observed absolutely. In the contemporary situation, however, I believe that it would be expedient to grant the commanders greater independence with respect to deciding on specific financial issues. Unfortunately, as experience has shown, not every ship, unit and formation commander today dispenses the funds allocated to him in a fully responsible manner. Take just the infractions of manning discipline. They cost the Navy tens of thousands of rubles annually. Monitoring is still therefore essential.

[Gladkevich] The commanders do not deny the need for monitoring. It is the view of some of them, however, that finance agencies frequently substitute unlawful dictation for monitoring. This is what Sr Lt I. Pupkov of the Pacific Fleet writes, for example: "Our destroyer temporarily moved to another base for the winter. We cannot transfer money even to get our underwear washed at the laundry. Workers in the finance service maintain that we can spend our money only at our permanent base."

[Belov] Under existing regulations a ship located at a temporary base is provided with necessary pay and allowances at the finance and accounting unit at the finance service at the naval base or at the shore base. Furthermore, even if the ship has arrived without its finance papers, it must still be provided with everything necessary, which is entered in the ship's finance and accounting book and reported to the finance agency at the permanent base....

[Gladkevich] Capt 1st Rank V. Shirokov has two questions. How long, he asks, will the obsolete listing of everything a ship must procure for organizing the combat and political training be retained? His second question is why the ship or unit may not utilize money paid as reimbursement by parties guilty of causing damage.

[Belov] I shall begin with the second question. According to the present documents, money withheld from guilty parties as reimbursement for material damage goes into state revenues. Losses incurred on a ship, however, are replaced without payment from a depot. If this is not being done somewhere, then it is a serious infraction on the part of the supply agencies.

With respect to the first question, it is absolutely valid. We consider it our job to rescind the requirement for this obsolete listing. We are convinced that there is an obvious need to reduce the number of articles drastically. This will free the commander and enable him to maneuver funds when necessary without fear of being accused of violating finance discipline. A proposal to this effect has been sent to the Central Finance Directorate of the USSR Ministry of Defense.

[Gladkevich] Viktor Aleksandrovich, this proposal has merely been submitted. What has already been done in the Naval Finance Service toward the restructuring. What steps have been taken to eliminate petty tutelage of the commanders?

[Belov] We see our main job in the restructuring as one of improving the organizational structures and the performance of our specialists to make certain that the people's kopeck goes precisely and promptly for its designated purpose and is spent with maximum benefit to the combat readiness. Many specific problems have already been resolved in this area. Now, for example, money left over from individual budget items of the USSR Ministry of Defense goes not into state revenues at the end of the year, as was previously the case, but remains on the ship or in the unit and is carried over to the following year. The commanders have also been extended authority to purchase goods for general household, cultural and everyday purposes costing up to 100 rubles in the retail trade system. Previously they could make out a check for goods only in an amount of up to ... 2 rubles. Is there a difference?

I could go on with the changes. I consider it necessary to point out, however, the fact that the work of enlarging the commander's independence is coupled with work to increase the commander's responsibility. Accountability for squandering funds on capital construction and dragging out the construction of facilities has been made more stringent, for example. Last year the itemized lists were revised three times. Hundreds of projects which could not be considered urgent were removed from them in the process. The funds freed were applied to the construction of housing and of social and cultural facilities.

I must mention one other thing. The gaining of independence by the commanders is a process involving not just a restructuring of the finance system. We shall achieve a good end result only if we drastically enhance the legal literacy of commanders in general and in the area of fiscal law specifically.

One has to note that the changes mentioned by Maj Gen V. Belov are more cosmetic than anything else. The documents which hold the promise of basic changes—a reduction in the number of articles, for example—are still, in the fifth year of the restructuring, only in the development stage. The pace is clearly still yesterday's.

Critique, Response on Training of Air-Sea Rescue Personnel

90UM0020B Moscow KRASNAYA ZVEZDA in Russian 3 Oct 89 First Edition p 2

[Letter from Col G. Nazarenko and commentary by Col Ye. Zhivov, chief of the Search and Rescue Service of the Naval Aviation, under the rubric "The Problem Demands Resolution": "Is It Time to Rescue the Rescuer?"]

[Text] Until recently I served in an Air Force unit in which I took part in the testing of life-saving equipment for the crews of aircraft and space vehicles, including equipment used at sea. Because we performed difficult and dangerous jobs—catapulting from under water and emerging from a sunk helicopter, for example—my comrades and I became known as "stunt men."

Once, while performing one of our air missions, Lt Col V. Rassoshanskiy and WO Ye Turlakov, my comrades, and I abandoned the aircraft. Because of the cumbersome special equipment, however, and the wrong speed for the exit, my parachute pack caught on the door frame. The spring on the pack broke loose and flew into the straps. The cover did not come off the parachute. Rotating violently at an altitude of 1,400 meters, I was falling face-down toward the water. I made many mistakes in the emergency situation. The reserve parachute opened but not high enough for air to fill the canopy. Fortunately, I entered the water feet-first, which actually saved my life. I received numerous injuries, however, and broke my back in three places. I spent a year in a hospital. I then returned to the combat formation. I was no longer permitted to make parachute jumps, to be sure. I had to change my specialty. That incident made me think about major problems in the development of airborne search and rescue equipment, about who is in charge of it. "Nonorganic" people are frequently members of the crews of search and rescue planes and helicopters. Their training sometimes falls far short of the modern requirements. Capt G. Kholodnyy, Sr Lt V. Nayda and WOs Ye. Turlakov, A. Sviridov and K. Anashkin, nonorganic testers of air-sea rescue equipment who performed this difficult work, enjoyed none of the "flight status" rights and benefits, for example, which made it difficult for them to work productively.

The importance of the problem was graphically demonstrated by recent events in which the rescue of people at sea has become problematic. Despite rapid progress in science and technology, man still finds himself helpless in the domain of the water elements. The search and rescue equipment is still not ready for instantaneous use in any situation. And its infrequent use has generated in certain officials the attitude that it is not "profitable" to keep this equipment.

Here is an example of this kind of "economy." Sailors from the emergency rescue group (ASG) are assigned to the emergency rescue helicopter of the naval aviation as shallow-diving rescue workers. These specialists have a poor understanding of methods of performing rescue work from the rotary-wing machines, of course. They train extremely rarely as members of flight crews. The specialists do not have the proper physical or psychological conditioning.

Once, on a long cruise on the cruiser Minsk, we performed a sort of experiment. Eight crews from the ship's air group who were authorized to work on a search and rescue helicopter took turns removing "victims" from the water. On all of the crews sailors from the ship's combat air unit performed as the rescuers. They did not successfully complete a single one of the training missions even in the good weather conditions. A few days later, in a turbulence of 3-4 (balls) the helicopter crew commanded by Lt Col A. Zemtsov performed several evacuations of "victims." Their time was below the norm by a factor of 25 (!). Here we see the difference in the training of nonorganic and organic crews.

We have some experience in this area, by the way. On one of our temporary duty assignments on a ship, at the command element's request, we trained shipboard rescuers. In three and a half months of focused training we provided the trainees with adequate knowledge and developed the essential skills in them. The soldiers soon found themselves performing in a real situation, and they rapidly came to the rescue of an individual and saved his life. This was most likely an isolated case of this kind of training, however. There is no system for the training of specialists. We do not even talk about setting up centers for training rescue workers, such as those which exist in many foreign nations. We can only dream about good gear for operating over woods, in mountains, on and under the water.

In short, it is time to rescue the rescuers themselves. I suggest that we begin by working out personnel problems. By setting up the purposeful screening of candidates to

become rescue workers at the aviation sports clubs, the DOSAAF air clubs and the nation's military commissariats. The training of the soldiers would be conducted at a training center (school) for airborne rescue workers (with a 1-year training course).

Based on our experience, the center's programs should be developed in accordance with the class of aircraft, the area of the nation and its specific climatic conditions. It should be replete with those kinds of physical conditioning and sports which would provide everything necessary for performing in any emergency situation.

There might be other suggestions. Perhaps I am expressing controversial ideas. The main thing, however, is not to close our eyes to the problem, because it involves human lives.

The editors asked Col Ye. Zhivov, chief of the Search and Rescue Service of the Naval Air Force, to comment on this letter.

The author of the article brought up an important issue. His concern about the inadequate training of the airborne rescue workers is understandable.

I cannot agree with his assertion that there is no system whatsoever for the training, however, that rescue workers are physically weak and cannot always render assistance in emergency situations. Rescue workers on Kamchatka, for example, have behind them 3,000-4,000 parachute jumps in the most difficult conditions. Only physically strong people are capable of this.

Or take this fact. In November 1988 an Mi-8 helicopter of the Norilsk Air Detachment of the Ministry of Civil Aviation piloted by V. Argetkin, aircraft commander, made an emergency landing while flying some fishermen to one of the lakes. N. Klevakov, one of the fishermen, was seriously ill. An An-26 search and rescue aircraft with a group of rescue workers on board flew out from one of the airfields in Krasnoyarsk Kray to provide medical assistance. Sr Lt Kovran Shatayogly Mamedov parachuted over the Ust-Tareya site and provided medical aid.

I could cite numerous other examples of the courage of rescue workers, particularly in the performance of international assistance in the Republic of Afghanistan and in Armenia following the earthquake. But let us move on to the essence of the problem.

The training of personnel for the parachute rescue groups (SPDG), as they are officially called, is conducted in the air units under the direction of the chief of the Search and Rescue and the Airborne Service (PSS and PDS). They are allocated 100 hours of training annually. Furthermore, at least 90 parachute jumps are scheduled for each member of an SPDG (100 jumps for the organic rescue groups) for the most difficult types of training. Two 10-day assemblies are held during the year in the fleet air forces.

This system has been used for 2 years now and is already producing its first positive results. It has big minuses, however. Naturally, the training of rescue workers in the units depends upon the training of the instructors themselves, upon the training facilities for conducting the classes and their technical equipment. This cannot be equally good everywhere, of course, particularly since the chiefs of the PSS and PDS in the air units ordinarily do not have much experience. We therefore fully agree with the author that what we need is precisely special training for rescue workers.

For this purpose it is planned to train personnel for organic rescue groups in a special center under the direction of veteran instructors at the end of 1989. The training program is designed to develop and improve skills in parachuting into water, into woods and at night, in non-parachute landings using lowering devices and providing first aid. We shall teach them what to do at a fire and in the evacuation of victims from an aircraft and how to use floating equipment for rescuing people on the water.

In addition, it is planned this year to add air-rescue medics (divers) to the crews of search and rescue helicopters of the fleet air forces. They will undergo training at special assemblies each year.

I would like to focus attention on the important matter of supplying the rescue equipment and naval rescue suits without which providing assistance on the water becomes a difficult problem. Both the supply organizations and the designers of rescue equipment are to blame for their absence.

From the editors: We can see that it is planned to resolve the problems raised in the letter from the reader. We had hoped that the "sticky issues" would be treated with greater urgency. Particularly those which caused the loss of the nuclear-powered submarine along with a considerable part of its crew. Unfortunately, those who are devoting inadequate attention to the development and production of airrescue equipment and the training of personnel for the service are not named. Nor is anything said about how it is planned to overcome departmental segmentation. In short, it is too early to say that the matter has been resolved.

Renewed Attention to Rescue Equipment Following Sub Sinking

90UM0042A Moscow KRASNAYA ZVEZDA in Russian 13 Oct 89 First Edition p 1

[Article by Capt 3rd Rank S. Tyukachev, Northern Fleet: "The Sea Does Not Forgive Errors: Follow-Up on Practical Exercise in Auxiliary Vessel Unit"]

[Text] Several years ago a fire broke out on a Northern Fleet nuclear-powered submarine returning from combat duty. The crew succeeded in extinguishing it Unfortunately, however, not without loss of life.

The older generation of submariners recall that tragedy of long ago. One of them is Capt 1st Rank G. Yakovlev. He saw the burning compartment with his own eyes and buried military comrades.

"I recall Sr. Seaman Suvorov, the ship's cook. It was said that when he began serving on the nuclear-powered submarine, he was not particularly zealous in the study of his combat duties or in the damage-control exercises and drills. After the fire, though.... He became a different sailor.

But what about those who have not experienced such a thing? How are we to increase their sense of responsibility and motivate them in their service? There is probably only one way: make the combat training as realistic as possible, decisively eliminate simplifications and strive persistently to create an appropriate situation in the damage-control exercises and drills.

"This is just what we had in mind when we planned the drill for the ship commanders," said Sr Lt A. Goncharov, diving specialist in the search and rescue service. "Since the loss of the nuclear-powered submarine Komsomolets, personnel on the ships have taken a new look at the organic life-saving equipment. Its availability and its condition have been checked, and the personnel have practiced using it

Nor did headquarters remained on the sideline. Under the supervision of Capt 1st Rank V. Volnov, deputy chief of staff, a detailed plan was compiled for the drill.

The helicopter pad on an icebreaker was selected as the site. Ship commanders and specialists in the search and rescue service were enlisted for preparing the training materials. Capt 3rd Rank R. Sharinbekov, deputy unit commander, and N. Krasovskiy, captain of the icebreaker, specified hypothetical incidents which would simulate an emergency situation adequately effectively. Among other things, it was planned for two members of the icebreaker crew actually to go overboard. Another sailor would use an inflatable raft dropped from the icebreaker in advance for assisting the "victims."

Capt-Lt A. Shatskiy, engineer for emergency rescue work, was assigned the mission of being ready to approach the raft in a launch and remove the sailors from it.

The drill began. An abrupt jerk on the line, and the inflation system was activated. With great interest everyone focused their gaze on the container bobbing on the sea. They expected the raft to rapidly inflate right away. The life-saving equipment only gave off bubbles for a while, however, and "struggled" to remain afloat. The raft then began slowly sinking.

Capt-Lt A. Shatskiy was ordered to raise the life-saving equipment. When the PSN-6M was hoisted aboard and unfolded, they saw that the raft had been cut and taken apart. Some thief had been drawn to the sack containing the gear.

The incident with the raft ended safely that time. Luckily, it underwent an unscheduled test on the icebreaker.

I recall a photograph which made the rounds of numerous central newspapers this spring. It was taken in the Norwegian Sea from an Orion aircraft. It showed a small life raft surrounded by lead-colored waves. The heads of submariners showed black around its perimeter. This tiny inflatable island was the only thing they had in the ocean to augment their personal bravery. At first one inwardly rejects the picture. These are not our sailors. Ours would not be in such a situation. Someone is playing a trick. Nothing happens to our ships. They are the most reliable in the world, and accidents pass over them....

It seems that I was not the only one who reacted to the newspaper photograph in this way. The participants in that tragedy also did not believe until the last moment that the submarine was lost. This is what Capt-Lt Vitaliy Gregulev had to say at the hospital:

"When I leaped from the conning tower and surfaced, I turned around and saw that the submarine was sinking. I could not believe my eyes. I was absolutely certain that nothing could happen to it...."

We know that the daily work on a ship involves constant danger. When nothing happens for weeks and months on end, the sailors become used to the danger and are not conscious of it. That is the way human beings are. This tendency has other roots as well, however: window-dressing, ostentation, a low level of professionalism and irresponsibility. Take the recent past, for example. Revolutionary changes have occurred in the equipment. These have for objective reasons brought increased danger, made it necessary to be more demanding and increased the role of the human factor. For decades we were assured that our ships were indestructible, that they had some sort of mystical protection against accidents and loss at sea.

Many recruits still enter the navy with this kind of stereotypical thinking. They know that it will be difficult, but they are confident that should something happen—and actually nothing should—helicopters, planes and rescue vessels will immediately come to their aid. This is in part the cause of attitudes of dependency, a frivolous and irresponsible regard for the shipboard life-saving equipment. The rafts, sloops and launches, among other things. The ending of the drill on the icebreaker is further confirmation of this.

According to regulations the life rafts in a patrol boat unit are to be checked once a year at a shop of the submarine equipment detachment. They are hauled by vehicle many kilometers from the unit. The delivery of the life-saving rafts for a checkup and their return are therefore an event for the crew. It frequently generates guessing and rumors.

"Following the latest pickup of the rafts for a checkup and their return from the shop," Capt-Lt N. Kovalyuk told me, "someone among the sailors persistently started rumors that this time the containers were filled with alcohol and other 'special' medical preparations. Even a bottle of cognac had been laid in, it was said..."

In order to deflate the excitement generated by the rumors, the officer scheduled additional classes and tested his subordinates on the life raft's operating principles. The strange thing is that this did not halt the rumors about exotic things in the life raft. It did not even help when the officer published, so to speak, the entire list of the supplies and equipment kept on a raft. It is true what the people say: that a picture is worth a thousand words. Very few of the personnel got even a brief look, however.

This particular raft was ripped open not for the two pounds of vitamin-enriched lozenges or the fishing gear. It seems that they were looking for alcohol. Or "tipple," as naval wags call it....

The sea does not forgive errors. He who forgets this pays a high price for his errors. Frequently human lives, unfortunately.

But this is not a case of an error. It involves criminal laxity on the part of some people, an uncontrollable desire to get to alcohol on the part of people prepared to exchange their own safety and that of their comrades for a liter of the infamous "tipple." Also an equally dangerous irresponsibility on the part of people in charge, those who have not yet grasped the importance of individual and group lifesaving equipment to the ship's crew.

CIVIL DEFENSE

On Inclusion Of Cooperatives In Civil Defense 90UM0015A Moscow VOYENNYYE ZNANIYA in Russian No 7 Jul 89 [Signed to press 6 Jun 89] p 31

[The USSR Civil Defense Staff's response to previously published article: 'In A World Of New Realities'']

[Text] In an article under that title (VOYENNYY) ZNANIYA No 1, 1989, author I. Vakula raised the question of the need to include cooperatives in the system of general civil defense preparations.

At the editors' request, the USSR Civil Defense Staff reviewed the article.

Many people's concern over what measures are envisioned to protect cooperatives and their associations is quite understandable. The author rightly believes that cooperatives and their associations basically constitute elements of the local economy (city, rayon, and oblast economies) and should be viewed as units of the national economy. Consumers' cooperative enterprises and institutions could serve as an example for the organization and management of civil defense in cooperatives. Concern for civil defense in the former rests with territorial (local) bodies of Soviet government, civil defense, and superior organizations-in this case the country's Central Council of Consumers' Cooperatives and the regional administrations of consumers' cooperatives. For example, the Central Council of Consumers' Cooperatives and its enterprises are charged with certain duties having to do with meeting the vital needs of a stricken population in emergency situations in

peacetime and wartime, participating in the creation of necessary food reserves for such contingencies, and so forth.

The changes taking place in our country in the structure of political and economic administration will also doubtless affect the organization and management of civil defense. The enhanced role of local soviets as representative bodies of state power that unite, coordinate, and direct the activities of local self-administration will make it possible to implement social measures that will ensure the lives and activities of all USSR citizens regardless of what collectives they work in. All this is now being incorporated in the drafts of new legislative, directive, and normative documents. They will reflect the duties and rights of managers, officials, and all citizens with respect to the implementation of defensive measures, as well as their responsibility.

It should be pointed out that managers of independent cooperative enterprises and collectives, like the managers of state and public enterprises and organizations, will serve as the corresponding chiefs of civil defense.

At the same time, the possibilities of financing and of material and technical supply for civil defense measures, in view of the new forms of management of state enterprises and collectives farms as well as cooperatives, have yet to be fully determined.

And so an active search is under way as to how to resolve many questions of practical activity. The editors invite readers to continue this serious and topical discussion.

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Conversion: Prospects for Foreign Cooperation, Regulation

90UM0050A Moscow TRUD in Russian 18 Oct 89 p 3

[Article by V. Shatrov, professor, doctor of juridical sciences: "Conversion: An Area of Cooperation"]

[Text] There is an almost aphoristic saying: Disarmament is political ecology. Disarmament is also, in my opinion, moral refreshment, deemphasis of political ideology, and cleansing of world economic ties. In a word, this is a road to a new order of collaboration and cooperation between nations and peoples.

The general significance and global nature of the disarmament problem does not exclude, but rather stresses, the importance of the national aspect of this problem, for it is individual countries that are doing the disarming in the final analysis. Paradoxical as it may seem, disarmament problems that are difficult to resolve are encountered at the national level.

It is a fact that the production of weapons, invention and development of new weapon types, and weapons modification, distribution, storage, servicing, and transportation have become in most countries an industry that constitutes a considerable sector of the national economy. Concentrated in this sector are an enormous intellectual potential, vast human resources, and property that is worth many billions. Let us also note that sales of weapons have become increasingly important with each passing year in the external trade balance of many countries. As a result, disarmament must be considered in the light of resolving a complex of problems of an economic, scientific and technical, social, demographic, and legal nature.

Of course, the freeing of astronomical sums of money as a result of reductions in expenditures for armaments and maintenance of armed forces will result in enormous budgetary savings; make it possible to utilize the creative potential of highly qualified personnel in nonmilitary production; and employ in the development of the national economy highly advanced technology and materials previously reserved for the military sector, etc. However, military production is a business that brings a substantial profit in the West, such as to the military-industrial complex, for example. Specialists involved with research for the military are compensated well for their labor and enjoy substantial prestige.

In connection with the world community's interest in dealing with the disarmament problem, the conversion concept has taken hold in a number of countries. Conversion is generally defined as a switch of a nation's economy or of its individual branches to the production of material goods having a peaceful purpose.

Conversion in the case of the Soviet military economy has become in our time more than an established scientific concept; it has also become a completely tangible reality of social development.

Thus, plans for the 1990-1991 period call for reducing the Soviet Union's military budget in the amount of 10 billion

rubles—a reduction of 14 percent. This represents savings of 30 billion rubles for the current five-year period. Forty percent of the output of the "defense people" is already slated for "civilians." In 1995, this figure will attain 60 percent. In the forthcoming five-year period, nonmilitary production of military enterprises will amount to 250 to 270 billion rubles. Even this may not be the limit.

As a process involving realignment of a considerable sector of the national economy, conversion is a complex phenomenon—one requiring much planning. For this reason, its realization is associated with a multiplicity and diversity of schemes. Fundamental reorganization of enterprises subject to conversion and of individual branches requires suitable preparation in addition to a certain amount of time.

Prominent among conversion measures presently in progress are: transfer of combat materiel, equipment, and transportation items, and the sale of military property, to the civilian sector; manufacture of products for the national economy by "military" plants; utilization of military equipment, especially that which is transportation-related, in the interests of the national economy.

Within the framework of the INF Treaty, oilmen, geologists, builders, and power producers have already taken delivery of more than 110 large-capacity trucks previously employed as launcher chassis for shorter-range missiles and transporters. "Kranlod," a joint Soviet-West German enterprise, is successfully "converting" prime movers for medium-range missiles into powerful cranes. A number of plants that produced medium-range missiles are manufacturing metalworking machine tools and drilling equipment. It is expected that rear service organizations of the USSR Armed Forces will soon sell equipment and materials worth 1.5 billion rubles to civilian users.

The needs of the national economy are being successfuly filled by military transport aviation. In this year alone, it will carry 50,000 tons of civilian freight. Its unique capabilities should tend to overcome the critical situation of civilian transport aviation, but cooperation between these solid partners will entail some conflicts. In addition, an idea has been put forth to employ the Air Forces to set up a passenger airline that would compete with Aeroflot.

Conversion of military production and individual branches of the military economy by its very nature is destined to become a new phase in mastering the attainments offered by scientific and technical progress. The products put out by enterprises undergoing conversion should become a standard of highest quality, of fundamentally new consumer characteristics and competitiveness in the external market. In this case, however, conversion will not become a mere means of patching holes in our national economy. For example, there are grounds to expect a high level of return from "military" space in the matter of installing telephone service or mastering the reception and transmission of cable television programs on an international basis. Creation of the Energiya-Buran system

resulted in developing more than 240 technological processes, 130 types of advanced equipment, and 100 new materials that can be utilized in various branches of the national economy.

The SU-27 fighter-interceptor created a sensation at this year's air and space show competition held at Le Bourget. Experts were unanimous in their opinion that it is superior to the world's known analogues. The success of the SU-27 makes it possible to form the following conclusions: First, a very high technological level exists in the USSR defense industry; second, the craft reflects a defensive doctrine, for the SU-27 is not an offensive weapon; third, the fundamental newness of the aircraft is conducive to competitiveness, which lays the foundation for selling it in foreign markets; last, the craft of and by itself is an example of a kind of conversion, since creation of the SU-27 provided the firm's designers with the opportunity to work on the creation of civilian airplane models S-80, S-84, and S-86. Fifty percent of the effort at the Special Design Office imeni P. O. Sukhoy is presently being devoted to conversion work.

Plans call for creating 3,000 new world class products; such is the conversion program for defense branches and their science. The development of complex science-intensive technologies will be central to this process, which is part of the general economic perestroyka process. N. I. Ryzhkov rightly stated that we require conversion of minds as much as we do conversion of equipment. This alludes to the need for complete mobilization of the intellectual, scientific, and technical potential that the military branches can bring to bear on making conversion a reality.

Our hope is that conversion of the military branches of industry, geared to the development of the latest technologies and products that meet and surpass world standards, will assist our economy in taking its proper place in international division of labor and become an actual part of world economy, an equal trade partner of the world's leading economic powers.

At the same time, there is a need to endow conversion with precise and all-embracing legal regulation. The State Program of Conversion of the Defense Industry for 1991-1995 is being readied. Bearing in mind the conversion experience gained after the Great Patriotic War and the positive aspects of economic demilitarization that took place in some Western countries, this program should be backed by a judicial instrument. In addition to priorities of conversion task resolution, the program should include; measures calculated to introduce financial responsibility in defense enterprises; terms specifying compensation for expenditures incidental to development of advanced technologies on the part of other users; and problems related to personnel retraining, reemployment of released specialists, standardization of pay, and social aspects. Provision must be made for: expansion of direct ties, trade agreements, and mutually advangeous cooperation; formation of concerns and associations; the possibility of internal competition between enterprises and participation by the "defense people" in establishing a socialist market. The program must necessarily be submitted to wide public discussion and consideration by the USSR Supreme Soviet for passage as an act of legislation.

The conversion process manifests itself at two levels: national and international. Under the conditions attendant to interdependency and communality of nations and integration into the world market, conversion as it proceeds in a particular country cannot fail but affect the world economy. Ever more obvious is the need for constructive international cooperation in the matter of conversion, such as in the development and comparison of national conversion plans, which would be an important contribution to strengthening mutual trust. Soviet leaders have expressed their willingness to cooperate with the U.S. in questions of conversion.

There is a possibility of developing a multilateral convention that would render obligatory for member nations a system of cooperation for conversion and rational utilization of released facilities, technologies, and human resources to establish a conversion economy. For example, international cooperation could be applied to the utilization of S-18 missiles to lift artificial earth satellites into space for monitoring the environment. The collective approach can be employed to render assistance to developing countries within the context of the program "Disarmament for Development," which is being modified into the "Economics of Disarmament for Development" program. Some aspects of military technology that can be used in a civilian economy will be placed on the help list for the benefit of developing countries. There is also merit in organizing an international fund to assist countries in realizing their conversion plans. The point is that conversion is a process that is destined to encompass all countries, not only the great powers.

The creation of a broad conversion program on an international scale, exchange of experience, rendering of aid, and offering of technical and material assistance should be placed under the effective control of a world association.

Disarmament has no limits. More accurately, it will no longer be required only when weapons as such are eliminated and their production banned. Also unlimited will be the process of conversion and cooperation practiced by countries to make the latter a reality.

Conversion: Reader Suggests Civil Use of Military Airports

90UM0050B Moscow IZVESTIYA in Russian 18 Oct 89 Morning Edition p 6

[Letter to the editors by reader A. Pivnik of Moscow: "Also a Military Airport"]

[Text] Who has not experienced difficulty obtaining tickets, suffering delays that complicate flying south on vacation every summer? Most of the trouble is due to shortcomings in ground facilities of Aeroflot. This includes runways, airports proper, and overloaded air traffic control systems.

One solution may be the utilization of military airports (especially alternate facilities) that carry little traffic. Evidently, the Union Council Commission for Problems of Transportation, Communications, and Information would be ideally suited to looking into this approach to resolving the problem. Also, this is an aspect of the conversion that has been the subject of much discussion.

Foreign experience in this area has been acquired. Charter flights to Yugoslavia from a British Air Force base have already been accomplished this summer. The British House of Commons is considering a list of military bases as candidates for nonmilitary airports (for joint usage), including the Greenham Common base so familiar to Soviet people, after which the American missiles will be removed in accordance with the agreement on mediumrange missiles.

Military pilots recently took on the difficult task of delivering essential supplies to Armenia. However, that was an extreme situation. Why not utilize military transport aircraft to carry civilian freight on a routine basis?

Role of Defense Conversion in Economy Outlined 90UN0208A Moscow MOSKOVSKAYA PRAVDA in Russian 24 Oct 89 pp 1, 2

[Unattributed report: "Conversion: The Moscow Radius of Action"; "Meeting of the Capital's Party-Economic Akitv"]

[Text] The determination of the short-term and longterm tasks of conversion and the development of approaches to carrying them out taking into account the new system of economic relations that is being formed in the country's national economy and the Moscow region were the subject of discussion at a meeting of the capital's party and economic aktiv held yesterday. Gathering in the social and political center of the Moscow city committee and the Moscow committee of the CPSU were secretaries of party organizations, general designers, directors, chairmen of councils of labor collectives and trade union committees of industrial enterprises and scientific institutions, secretaries of CPSU rayon committees and chairmen of rayispolkoms [rayon executive committees], ministers and secretaries of party committees of union and republic ministries, officials of the State Committee of the USSR Council of Ministers for Military-Industrial Questions, the USSR Gosplan [State Planning Committee], the USSR Gossnab [State Committee for Material and Technical Supplyl, the USSR Ministry of Defense, deputy chairmen and chiefs of main administrations of the Moscow gorispolkom, chairmen of the Moscow City Trade Union Council, and bureaus of central committees of branch trade unions.

"The scale of conversion and its socioeconomic consequences will exert a significant influence on the development of Moscow as one of the largest economic centers of the country" said L.N. Zaykov, a member of the Politburo of the CPSU Central Committee, secretary of the CPSU Central Committee, and first secretary of the Moscow city

party committee, as he opened the meeting. "The enterprises and organizations of the capital's defense complex play an essential role in its economy and affect its social image to a significant degree.

"Suffice it to say that more than one-third of the volume of industrial production and half of all the scientific research and experimental design work of an applied nature conducted in Moscow come from enterprises, scientific research institutes, and design bureaus of the defense industry. One-fourth of the city's workers are employed in the defense complex. This determines the measure of responsibility that lies with all of us for the adoption and implementation of decisions concerning conversion in the region and makes it necessary to develop measures for controlling this process."

I.S. Belousov, deputy chairman of the USSR Council of Ministers, chairman of the State Committee for Military-Industrial Questions, spoke at the conference.

In the modern stage of development of international relations the possibility of providing for the country's security has enabled the CPSU Central Committee, the USSR Supreme Soviet, and the government to adopt a decision for stage-by-stage reduction of military expenditures by 14.2 percent, including reduction of deliveries of arms and military equipment by 19.5 percent and the volume of scientific research and experimental design work by 15 percent in 1991.

A typical example: For the first time in many years as a result of the reduction of the output of military aircraft and helicopters we have achieved a real increase in the deliveries of passenger aircraft for civil aviation and for export and, striving to create a stockpile for a significant increase in the output of aircraft for Aeroflot under the 13th 5-Year Plan, we have planned an annual increase in the production volumes for civil aviation of 28 percent as compared to the usual 5 percent. Muscovites have been called upon to make a weighty contribution to this, above all, the development and testing of Il-114, Tu-204 and Tu-334 aircraft and also the Yak-42M.

Conversion creates prerequisites for solving problems of national economic significance of the kind that previously were not even dreamed of: Under the 13th 5-Year Plan achieving complete satisfaction of the demand of civil aviation for passenger aircraft. Special significance is being attached to Moscow in this matter.

An essential role in the development of the state plan for the conversion of the defense industry should be assigned to the USSR Academy of Sciences. This is the more necessary since, in keeping with the decision of the Politburo of the CPSU Central Committee, it is responsible for comprehensive scientific development of the problems of conversion of military production.

In spite of the difficulties of restructuring the economy of the defense complex, one can say that "without shutting down" serious changes must be made in the interests of the national economy as early as 1990. We are speaking about a significant increase in the growth rates of civilian output through reduction of the output of military equipment and active utilization of the complex's scientific and technical potential for civilian items.

At the same time we must get rid of the ingrained ideas that the defense complex is saturated with the latest technical equipment and that for the defense complex there are no limitations on financing, the allotment of hard currency, and so forth. It is also wrong to think that in the defense complex there are great advantages in wages over those who work in the civilian branches of industry. The idea of the defense complex as one that swallows up state resources without restriction is erroneous and dangerous, I.S. Belousov emphasized.

Yes, our people have created the necessary conditions to provide for the country's security in the most difficult periods of its development. Yes, taking away from themselves, our people have provided the necessary equipment for our army, air force, and navy. The expenditures were large but in the situation of the cold war and the arms race there was no other way. But in recent years, fortunately, the situation has changed. This is a manifestation of the will, the persistence, and the sober and correct evaluation of the situation on the part of the Central Committee of our party and our government.

The defense potential created by the people now and only now, because of the new approaches and because of the real results that have been achieved in detente and because of—and this is the main thing—the new political thinking, can and should be used to a greater degree than before for developing the country's national economy and for solving the most crucial national economic problems.

However, all this must be done intelligently, with a cool head, on the basis of in-depth economic analysis. Regardless of how great the scale of conversion may be, it is subject to precise calculation; it is great but not limitless, and it can be used only in a specific, limited number of areas, for any other approach will lead to a dispersion of resources and to an "erosion" of the possibilities of conversion so that the people will not experience any appreciable results. This cannot be allowed, for then an economic mistake would inevitably grow into a political one.

For the country's economy, especially in a difficult financial and economic situation, a reduction of expenditures on arms and conversion of the defense industry mean a significant release of financial resources for solving national economic problems.

Conversion will make it possible before the end of the 5-year plan to produce 12 million rubles' worth more nonfood consumer goods than were envisioned by the 5-year plan, to increase sharply the growth rates of the deliveries of equipment for processing agricultural products, and to increase significantly the deliveries of equipment for light industry, trade, and public catering.

In 1990 the defense complex is to produce a total of 1.3 billion rubles' worth of medical equipment (as compared

to 993 million rubles' worth in 1989) and in 1995 it will manufacture 2.7 billion rubles' worth of this technical equipment.

Conversion gives us justification for counting on a significant increase in the output of electronic equipment: The production volumes should be doubled over the next 5-year plan. Under the 13th 5-Year Plan the output of personal computers will increase by a factor of 5 and computer equipment by a factor of 3. The production of means of communication will increase by 80 percent.

On the whole the assessment of the situation that has developed and the comparison of the capabilities of the defense industry with the needs of the national economy make it possible to confirm the "sore spots" for whose treatment the defense industry will be used: Equipment for the processing branches of the agroindustrial complex, for light industry, trade, and public catering, nonfood consumer goods, electronic equipment, computer equipment, medical equipment, means of communication, civil aviation, maritime transportation, and fishing ships.

Of course this does not rule out the possibility that defense enterprises can participate in the work in other areas of science and technology in the country's national economy. For example, we are now discussing the possibility of creating an experimental magnetic suspension transportation artery from Sheremetyevo to the center of Moscow. Even in this stage of the discussion the Special Design Bureau imeni A.S. Yakovlev (A.A. Levinskikh, general designer) is actively engaged in the work and is taking responsibility for creating ground "carriage" which will nonetheless have the speed of aircraft of 400-500 kilometers per hour.

Adding an acceleration unit to the largest energy carrier in the world, 'Energiya,' will make it possible to put into geostationary orbit a communications satellite with a unified space platform weighing up to 18 tons. And this will make it possible to make a qualitative leap in the creation of a new communications structure within the country. Such a space system can be used not only for transmitting a large number of telephone signals, but also for exchanging television and radio programs among oblasts and republics, transferring large masses of information between computer centers, and organizing teleconferences.

The speaker went on to explain the government position on including the defense complex (of both industry and science) in the aforementioned areas. Those who consider it expedient to include the defense complex in a considerably larger number of areas of the national economy should take into account that the erosion of the capabilities of the defense industry will not produce an appreciable advantage.

One also frequently encounters the viewpoint that it is inadmissible to use the released capacities for producing equipment for the agroindustrial complex, light industry, trade, and public catering, and they should be used for products closer to the initial profile in terms of scale, sizes, technical complexity, and so forth. At first glance this seems correct. But one must not forget that the country's economy is in extreme conditions (this pertains above all to agriculture and the saturation of the market with goods) and, correspondingly, the measures should be extreme and calculated for solving the problem in 2-3 years.

And who, for example, can solve the problem of equipment for the agroindustrial complex? Who in this amount of time can organize the production of the same quantity of equipment as was made during all the past 40 years? What complex? Metallurgical, chemical-forestry, energy? Machinebuilding? The last is the closest to the defense industry in terms of technical capabilities, but the level of machinebuilding in the country itself required the adoption of immediate measures.

Moreover, if we wish, not in words but in deeds, to produce these products at the world level, in terms of design is it really much simpler than defense products? No. There are "gadgets" that are just as difficult as the most modern defense equipment.

We are all residents of Moscow where one must assume that the provision of goods is a little better than in other regions. But in spite of this there are not enough good products and what does appear in the stores is "swept from the counters." There are not enough technically complicated goods, and the responsibility for creating these previously lay largely on the defense complex. The quality of the goods is clearly not as good as the quality of those made in developed capitalist countries. Who besides defense workers can really solve this problem? Who can provide for making television sets at the quality level of Sony, stereo systems at the level of Sharp, cameras at the level of Nikon, and motorcycles at the level of Honda?

None other than the defense industry can really provide for this in the next few years!

The general direction during the period of conversion should be a large amount of organizational work for transferring to the national economy the new materials and technologies used in the defense industry. Incidentally, this work should be organized at a new level and not just because of conversion but because of the obvious shortcomings in the organization of all the work during the entire period of the creation of military equipment and arms.

The conversion of defense enterprises of Moscow will make it possible under the 13th 5-Year Plan to considerably increase the production of nonfood consumer goods that are extremely necessary to the national economy. The volume of their production should reach more than R3 billion by 1995 or should increase by 65 percent.

During the course of the development of the draft of the plan for conversion it will be necessary to clarify questions of changing scientific research and design organizations over to the development and creation of new models of civilian products and consumer goods that correspond to the latest achievements of science and technology. Perhaps this is the most difficult question, which touches on the organizational, economic, social, and moral aspects.

Is it possible to find solutions in scientific research institutes, design bureaus, and plants—solutions that are unexpected, progressive, and unusual? Of course. Here is an example: Because of the initiative of the Design Bureau imeni P.O. Sukhoy (M.P. Simonov, general designer) an interesting business contact was arranged with the Americans for creating supersonic and subsonic business aircraft. We are speaking about a modern enterprise.

The creation of an information network in Moscow should be an important step in improving computer service for the population, increasing computer literacy, and enlisting youth in solving problems of information science. There are now 17 of these centers in operation in 14 regions of the city. In 9 months about 350,000 people have visited the information centers. In keeping with a joint decree of the Mosgorispolkom [Moscow city executive committee] and the USSR State Committee for Science and Technology, in 1989-1990 such centers will be created in every region of the capital.

During the course of the development of the draft of the state plan for conversion, the nondefense branches received new suggestions for using in the national economy the scientific and technical potential of the defense complex in the area of materials and technologies. About 1,000 more proposals are being prepared. This work is extremely important and should be given a place in the refined program Progress-95. But so far the work is proceeding without enthusiasm and, the main thing, it is uninteresting. The defense complex even now is annually transferring to other branches up to 100,000 sets of technological documentation for the introduction of its scientific and technical achievements into the national economy. But the developers have practically no information on how to use it. All of this work must be systematized.

Just from the results of the creation of the 'Buran' space rocket system more than 600 modern technologies, new materials, and developed technical means were suggested for use in the national economy. It should be noted that about 150 scientific research institutes, design bureaus, and enterprises of Moscow provide more than half of the overall volume of work for designing and manufacturing the 'Energiya-Buran' system. Successful implementation of the measures for introducing scientific and technical achievements from the space area will make it possible to raise the technical level of our industry and the ability of our equipment and goods to compete.

The city's cooperation with the USSR Ministry of General Machinebuilding has assumed concrete form. The work of the enterprises and organizations of this branch is conducted within the framework of a joint decision of the ispolkom of the Moscow soviet and the ministry board and is directed primarily toward solving the priority problems of the development of the branches of the Moscow city economy during the period of 1989-1995.

In conclusion the speaker said that efficient, organized work for conversion should help motivate others, mainly developed capitalist countries to conduct a reciprocal reduction of military expenditures so that we shall have good prospects for further reduction of these expenditures while maintaining sufficient defense capability and thus be able to invest more means in solving the most important problems of the country's social and economic development and improving the well-being of the Soviet people.

A.I. Zemskov, first secretary of the Voroshilovsky CPSU Raykom [rayon committee]; O.N. Shishkin, minister of general machinebuilding; I.M. Golovkov, deputy chairman of the Mosgorispolkom; A.G. Bratukhin, first deputy minister of the aviation industry; V.V. Kulichev, chairman of the labor collective council of the Moscow radio plant; G.V. Novozhilov, general designer of the Special Design Bureau imeni S.V. Ilyushin; V.I. Shimko, USSR minister of the radio industry; S.F. Koroba, deputy minister of the RSFSR [Russian Soviet Federated Socialist Republic] textile industry; V.A. Isachenko, director of the scientific research institute of machinebuilding technology; A.M. Moskvichev, chief of the main public health administration of the Mosgorispolkom; Yu.M. Luzhkov, chairman of the Moscow agroindustrial committee; N.V. Mikhaylov, general director of the Vympel Central Scientific Production Association; and B.A. Rylkin, secretary of the party committee of the Znamya Truda machinebuilding plant, noted in their speeches that the defense complex is playing an essential role in the economy and is significantly influencing Moscow's social image.

The speakers said that it is necessary to create all the conditions for increasing the development and output of consumer goods and equipment for the processing industry, light industry, and public health. At the same time it is necessary to preserve the intellectual potential of the defense branches and the high rates of development of the social sphere, to arrange close cooperation with the capital's economy, and to increase the contribution of the enterprises to the development of its infrastructure. Since the conversion coincides with the establishment of new political and economic relations, it is important to provide for planning of this process and control at the state and regional-branch levels.

The results of the conference were summed up by L.N. Zaykov. He said that the decision about conversion has set for defense branches of industry the task of changing capacities over from producing arms and military equipment to manufacturing products for civilian purposes and consumer goods.

The production of national economic products for the defense complex is not a new problem. Practically from the moment of the organization of the domestic defense industry many enterprises have been creating products for purely peaceful purposes along with weaponry and military equipment. The increase in its output, especially in recent years, has taken place at considerably more rapid rates than that of military products.

Thus, under the 12th 5-Year Plan the production of civilian products at defense enterprises will increase by 41 percent and reach several tens of millions of rubles. In 1988 more than 40 percent of the overall volume of production from the defense complex was civilian products and consumer goods, and in 1989 it is expected to be 43 percent, and by the end of the 5-year plan this proportion will be about 50 percent.

Under the current 5-year plan Moscow enterprises of the defense branches have overfulfilled assignments in terms of these indicators. In 1990 the production of products for the population will increase by an average of 35 percent as compared to this year. This will make it possible to produce 2 rubles' worth of goods here for every 1 ruble of the wage fund.

In 1988 a responsible new task was assigned to the defense complex—to provide for technical retooling of light and the food industry, the processing branches of the agroindustrial complex, trade and public catering. Here, too, a good deal is being done by Moscow enterprises, scientific research institutes, and design bureaus. But what with the shortage of goods and services and the high growth rates of monetary incomes of the population this contribution from the defense branches to the city budget is still inadequate.

Conversion is a changeover from an economy of arms to an economy of reduction of arms production and reduction of expenditures on defense needs. Its implementation will have a favorable effect not only on the world political climate, but also on the economic condition of our state.

For example, we know of imbalance and distortions that exist in our economy in certain branches of production and the development of individual branches of the national economy. It is necessary to use conversion to eliminate these economic disproportions or make them less critical.

Equalizing the scientific and technical level of defense and nondefense branches of industry is one of the most important tasks that must be carried out within the framework of conversion, particularly in the Moscow region. Everything advanced that the defense branches have at their disposal and that can be used in other branches of the national economy should be transferred there.

In the future this will produce an undoubted advantage also to the defense branches which, for example, at the present time are being forced to conduct research in all areas of metal processing and material science. It would be possible to continue the examples of the lack of development of division of labor between them. The main thing lies not in these examples, but in overcoming the historical disproportions in the development of various branches of the defense complex.

At the same time practical implementation of conversion, in turn, will require overcoming the most varied kinds of barriers. First of all it will be necessary to overcome the psychological barrier and carry out a "conversion" in the way of thinking of the leaders and also all the other workers in the defense industry enterprises.

This is not simple. Over the decades nobody has ever questioned the priority of military products. The most skilled personnel have participated in their production and the best resources have been invested here. The change-over of military production to a peacetime basis will become a reality when they recognize the fact that the state has no other path and that conversion will be a real help in satisfying the urgent needs of the people.

Questions in the area the economies of defense complex enterprises themselves are also crucial. The released intellectual potential of scientific research institutes and design bureaus of defense branches must also be used for solving the most crucial national economic problems.

For successful implementation of such a complex and multifaceted process as conversion, it is necessary to have a well-thought-out and coordinated program. Permanent organs of the USSR Council of Ministers, the USSR Gosplan, the USSR Academy of Sciences, the USSR Ministry of Defense, defense branches of industry, and other involved ministries and departments have been enlisted in its development.

Essentially only the first steps have been taken on the path to conversion. But as early as 1990 it will directly affect the city's enterprises and labor collectives.

The party gorkom puts the question this way: At each enterprise, regardless of what it produces, whether it be combat aircraft or radar stations, there must be a specialized production of goods. Its capacity should provide for their output in an amount of no less than 1 ruble for each ruble of the wage fund of the entire collective of the enterprise, taking into account the fact that the defense branches will produce mainly household equipment, and more.

We have already said at the bureau of the Moscow city committee of the CPSU that the leaders of enterprises and organizations in conjunction with the corresponding ministries when developing plans for conversion measures for 1990 and the 13th 5-Year Plan it will be necessary to develop a Progress-95 program for each plant, scientific research institute, and design bureau. In this work one must rely on maximally increasing the production and development of consumer goods and the rendering of consumer services. The Moscow city planning commission in conjunction with the ministries must take conversion into account and revise the plans of the enterprises for producing consumer goods and services.

Serious attention will be devoted to increasing the production of equipment for light and the food industry, the processing branches of the agroindustrial complex, trade, and public catering. Moscow enterprises are already producing 320 kinds of this equipment and more than 90 are in the stage of development.

It is no secret that the level of operation of the defense complex has always depended strongly on the effectiveness of the activity of the central organs. The reform has sharply expanded the rights of the enterprises and associations that are protected by the law on the state enterprise and economic levers are beginning to work. But the methods of the higher economic organs have not changed yet. In many of our ministries for many years instead of doing their work the workers have been spending their time in their offices talking about the future.

Two years ago we agreed that each ministry would assign one deputy minister who would be responsible for the state of affairs in Moscow. Time is passing but, as the study showed, the ministries have not yet informed the enterprises of the general line for conducting the conversion. Perhaps the time has come for both their colleagues and the party committees to start asking them questions.

At the same time labor collectives play a very large role in solving both social and production problems. Even this year has shown the difficulty with which the reorientation of defense enterprises is proceeding. But speaking about the prospects of conversion as a whole, one should note that this is not a utopian task. There is no doubt that in order to carry it out it will be necessary to solve difficult problems of a technical-economic and social nature which were mentioned above. But the difficulties related to this will be temporary and will in no way compare to the positive effect that will be produced by the narrowing of the arms race, the improvement of the international situation, and the increased confidence in the world.

The potential accumulated in the defense complex through the labor of several generations of Soviet people should be an important means for the stable socioeconomic development of our country.

The conversion of the defense industry is purely a party matter and it is party committees that are called upon to head up this work. But recently we have been observing a clear departure of party organizations from direct participation in solving economic problems—they say that when functions are divided up this is not the party's concern. A dangerous delusion. The state of affairs in the economy determines the sociopolitical situation and this cannot but concern communists.

It is true that we have removed the secret classification from our enterprises and that there are no more nameless "postal boxes." But nobody has abolished the extremely strict conditions in the matter of preserving the holy of holies—military and state secrecy. The leaders of the enterprises and subdivisions are personally responsible for this

The rayon party committees are also clearly paying less attention to the work of enterprises of the defense complex. We are not speaking about replacing economic leaders. We are speaking about increasing party responsibility for the state of affairs in these collectives.

A special role in carrying out the conversion is to be played by party committees of the ministries and other central departments. But here, too, all the efforts of the party aktiv are going for reorganizing the management apparatus. This is a necessary thing, of course, and people's destinies depend on it. But it should not stand in the way of other, equally important problems. It is necessary to place stricter demands on ministry boards who have been entrusted with the work in the central apparatus.

The defense division of the gorkom should also be working more actively. It frequently gets bogged down in purely economic problems and forgets about problems of the moral and psychological climate and the ideological situation in the collectives.

The party should learn from life. We know the Leninist principle to the effect that socialism is the creativity of the masses and not a bureaucratic exercise. We must develop conceptual approaches. But they can be realized only through organizational, ideological, and political work among the masses, through living practice. The party function is to advance the concept, to fight for socialist values, and after that everything depends on the creativity of the masses and our work with them.

We are experiencing a time that is fateful for the country. But regardless of what happens we must maintain the main direction of our movement forward. We need measures for reducing the socioeconomic tension. But we also need activity in the ideological sphere.

We are in a process of designing new forms of life—political and economic. Adopting measures for improving the market, carrying out the second stage of the political reform, preparing for and conducting the 27th CPSU Congress—all this will enable us in approximately a year to reduce the tension and give stability to our movement forward along the path of democratization and renewal of the economy. We shall firmly continue the development of socialism using the approaches suggested by perestroyka.

Participating in the work of the conference were N.P. Laverov, deputy chairman of the USSR Council of Ministers; O.S. Belyakov, chief of the Defense Department of the CPSU Central Committee; and Yu.A. Prokofyev, N.M. Andreyanov, and V.I. Kuznetsov, secretaries of the Moscow city committee.

Career of Armor, Maneuver Advocate—Marshal Yegorov

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[Article by Col (retired) A. Smetanin, honored cultural worker of the RSFSR, under the rubric "History and Fates": "Chief of General Staff Yegorov"]

[Text] "Could you describe in detail the life and career of Marshal Yegorov?" asks KRASNAYA ZVEZDA reader Ya. Kizko of Dnepropetrovsk Oblast in a letter. "I know that this brilliant military leader was subjected to repression and shot. That is about all. I would like to know more about him, though." Comrades V. Angel of Nakhodka, A. Tsaritov of Georgia, M. Filin of Penza, Lt Col (retired) A. Talvinskiy and other readers have also asked about Yegorov.

I can honestly say that Aleksandr Ilich Yegorov's fate has long interested me. Why indeed have the marshal's final months, if not years, been shrouded in secrecy until now? Why do certain files (even at the Institute of Military History of the USSR Ministry of Defense) state "Died 10 March 1941," even though we now know, according to the archives of the NKVD at the Military Bar of the USSR Supreme Court, that the marshall's life ended on 23 February 1939?

When I asked what documents the Central State Archives of the Soviet Army has on Yegorov, a worker there told me sadly: "Unfortunately, we have nothing personal on Aleksandr Ilich."

It was therefore necessary to assemble information for this article literally bit by bit.

"An Exemplary Military Man"

These are the words of writer Galina Serebryakova, who knew A.I. Yegorov well. They profoundly and thoroughly describe a most distinguished military leader.

...Central newspapers published a group portrait of the first five Marshals of the Soviet Union at the end of 1935. They stand in a row in the picture. But "First Marshal" Voroshilov seems to have moved a half-step to the fore, apparently so as not to be even with the others. His head is lifted somewhat. It is as though he is looking at the portrait of the one he enthusiastically called "Lenin's swordsman."

MSU A.I. Yegorov, first chief of the General Staff of the RKKA [Workers' and Peasants' Red Army], tall, well-built and with flawless military bearing, is on the far left in the row.

Aleksandr Ilich headed the General Staff in 1931, when the smell of powder once again hung over Europe, when the fascists were sweeping to power in Germany, when the drums of war were already sounding in the columns of Hitler's assault troops. Yegorov knew not just by hearsay what was occurring in Berlin. He had seen it all with his own eyes during a temporary assignment in Germany for

training. His analytical mind had already been noted in the German general staff, and he was considered to be "a strong military leader."

Biographical Notes

A.I. Yegorov was born on 25 October 1883 (not 1885 as erroneously stated in certain documents) in the city of Buzuluk, into the large and poor family of a stevedore, which moved to Samara when Aleksandr was still a baby.

He began to earn his own way as a blacksmith's assistant at the age of 11 years. "In all," he wrote in his autobiography, "I worked 6 years in the blacksmith's shop. I stoked the furnace with bellows and swept up the shop. I became an apprentice."

During those years he apparently mastered the entire grammar-school course of study, since he included a certificate of completion of the 6 grades at the Samara Classical Grammar School with his application "to His Imperial Majesty" for acceptance in the army as a volunteer.

Noncommissioned officer Aleksandr Yegorov submitted a second petition in 1902 for "most gracious permission" to enroll at the Kazan Junker Infantry School....

There are grounds for stating that Aleksandr Ilich was a conscientious officer, since he was decorated with the Order of Saint Stanislav, 3rd degree, for his service in peacetime. Commanding a half-company and then a company, he personally trained the soldiers in bayonet fighting and digging in, which were considered to be "a mandatory type of defense in a combat situation," and the art of accurate firing.

The lessons in military science came in handy very soon. As early as 13 August 1914, near the city of Busk in Galicia, Jr Capt Yegorov, commander of the 132nd Vender Infantry Regiment's 14th Company, roused it for a bayonet attack, when there was a sinking feeling in the pit of one's stomach and one's hair stood on end."

He ended World War I with the rank of colonel, decorated with five wounds and six orders.

N. Zavalishin, a retired colonel, recalls an interesting discussion he once heard while a student at the military academy, at the dacha of People's Commissar of Light Industry I.Ye. Lyubimov, with whose son he attended school. Some prominent military leaders and party workers, including Yegorov, were at the dacha that day, 12 May 1935.

Aleksandr Ilich told the other guests how the European armies were rapidly being motorized, their equipment being improved, their supply and support system being reorganized, and their general staffs studying military history and devoting a great deal of attention to Napoleon's campaign against Russia.

Somewhat later, he spoke of this again at a conference of military representatives, ending his speech with the following: "History has given us too little peacetime, and we must use it with maximum effectiveness to our benefit."

Marshal Yegorov was one of the initiators of the reorganization of the army and navy on a new, technical basis and a firm advocate of creating powerful, highly mobile armored and mechanized troops. He believed that the war for which Europe was intensively preparing would be conducted by millions-strong armies over enormous areas, with active operations on the flanks and in the rear area of enemy groupings and with extensive maneuvering.

Aleksandr Ilich arrived at his ideas about the role and importance of maneuver in a battle or an operation and its execution by large mobile formations back during the civil war years, when only the cavalry had this kind of maneuverability.

In May 1919, while commander of the 10th Army, Yegorov ordered that the army's 4th and 6th cavalry divisions be combined into a composite calvary corps. He appointed B.M. Dumenko, the army's assistant chief of staff for calvary, as its commander.

In a battle at the village of Pletnev on the Sal River, this corps inflicted a devastating strike upon Denikin forces attempting to capture a bridgehead on the northern bank of the Sal. The army commander personally led squadrons of the 6th Cavalry Division into battle and was wounded by a machine-gun round along with Dumenko.

The successful experience in the use of a composite cavalry corps, which became a part of the history of Soviet military art, served the 10th Army's Revolutionary Military Council as a basis for organizing the organic 1st Cavalry Corps, which became the 10th Army's main strike force.

A.I. Yegorov's appointment as chief of the General Staff occurred during the important and difficult period of technical rearmament of the army and navy. From his very first days in the position, he took a direct part in working out basic problems of the theory of Soviet military art and the organizational development of the armed forces. In 1932 Aleksandr Ilich submitted to the Revolutionary Military Council of the USSR the outline of a report on new operational-tactical problems arising as a result of the army's technical reconstruction. It served as the basis for the "Temporary Instructions for Organizing Combat In-Depth" distributed to the forces in 1933.

This was a fundamental view far ahead of the times. "The founding of the theory of the offensive operation in depth," recalled MSU G.K. Zhukov, commander of the 4th Cavalry Division at that time, "was a major achievement for our military art."

The offensive operation in depth, to whose development M.N. Tukhachevskiy and V.K. Triandafilov made a large contribution along with Yegorov, involved the use of a large quantity of tanks, aircraft, artillery and airborne landing forces.

In order to implement the principles of the theory formulated by the General Staff of the RKKA, however, it was necessary to restructure the army, outfit it with modern equipment and weapons and provide it with material support. Naturally, there were extremes in one direction or the other. Some comrades saw a future war as one primarily involving tanks. For example, this was manifested in a discussion of Eymansberger's book "Tankovaya voyna" [Tank Warfare] at the Central Red Army Club.

At Yegorov's assignment, a calculation was made of how many tanks, according to Eymansberger, would take part simultaneously in a battle. The number turned out to be 83,800. Yegorov inquired as to how such armadas would be supplied with ammunition, fuel and lubricants. And what about their repair? What should the T/Os of tank divisions be? He was not affected by "gigantomania" in these matters.

Aleksandr Ilich devoted just as much attention to improving the operational training of commanders and staffs. In his books "Taktika i operativnoye iskustvo RKKA" [Tactics and Operational Art of the RKKA] and "Zadacha sovremennogo voyennogo iskusstva" [The Mission of Contemporary Military Art], he especially indicated the need to provide for the training of highly skilled commanders capable of organizing a battle and an operation and of maintaining firm and uninterrupted command and control.

The history of the Soviet Armed Forces in the mid-30s was distinguished by large-scale military maneuvers, which subjected to a practical test the first steps taken in the Red Army's restructuring on the new technical basis.

Tank and mechanized formations, aircraft, cavalry, artillery and airborne units took part in maneuvers in the Kiev and Belorussian military districts in 1935 and 1936. They confirmed the correctness of the theoretical tenants contained in the "Temporary Instructions for Organizing Combat In Depth" and provided good training for the forces involved.

Yegorov's comrades in the service and his close friends knew him as a thoroughly educated and highly cultured man. He studied purposefully throughout his almost 40 years of service. N. Zavalishin recalled: "...I was amazed at his erudition. A military leader of the civil war, he had an engineer's grasp of technical matters. I once asked Bubnov (RSFSR people's commissar of education at that time—author's note) why Aleksandr Ilich had such a lively interest in industry, the designs of machines and engineering matters, along with operational issues. Sergey Andreyevich answered: "He had a good understanding of operational matters back when he was pounding Denikin. He has no engineering education, though. He therefore learns something from each of us by asking us specialized questions."

In his youth Sasha Yegorov dreamed of becoming a singer, since he had a fine baritone voice. In 1913, when the regiment was stationed in the Ukraine, Jr Capt Yegorov attended the Kiev Conservatory. He loved Russian folk

songs, which he sang accompanied by his wife, Galina Antonovna Tseshkovskaya. She graduated from the department of social sciences at Moscow State University but became a professional actress and appeared in movies twice.

One biography of Yegorov, written at the beginning of the '20s, stated that he went to Italy prior to World War I, received a musical education there and even sang on the opera stage. This is not confirmed by the records, however. The writer apparently did not quite accurately present the fact of his studies at the Kiev Conservatory....

Aleksandr Ilich also commemorated his 50th birthday as chief of the General Staff of the RKKA. He received this telegram along with other congratulations: "Bolshevik greetings to outstanding military leader of the civil war, one of the organizers of the Red Army on the Southern and Southwest fronts, and first chief of the General Staff of the RKO, on his 50th birthday.

"I wish you, dear Aleksandr Ilich, health and strength for the good of our own Red Army and to the terror of its enemies. Recalling the days of combat spent together at the fronts, I believe that your military knowledge and organizational skills will continue to successfully serve the good of our homeland.

"With a firm handshake, I. Stalin"

Following the "Firm Handshake"

The older generation should remember the poster which contained the portraits of marshals of the Soviet Union between the rays of a large red star. First on the left was Voroshilov, followed by Budennyy, Blyukher, Tukhachevskiy and Yegorov.

We village boys would run to the reading room again and again and stare in mute rapture for long periods of time at the large stars on the button tabs on the blouses and at the shoulder-belts, and argue about which of them was the biggest hero. The "biggest" were Voroshilov and Budennyy, of course, about whom we sang songs and read poems at our morning assemblies.

I remember another picture in some journal. It was Stalin holding a sniper rifle. It had been presented "to the leader of all times and peoples." Stalin was obviously pleased with the gift. He was smiling through his moustache and peering through the eyepiece, as though telling us that the leader saw everything, that one could not hide from him, that the weapon in his hand did not miss and a shot could ring out at any time.

And the shots did ring out—everywhere. In torture-chambers and basements, in gullies and suburban thickets, in the tayga and on the tundra. Point-blank shots, which always killed. Even marshals. Mikhail Nikolayevich Tukhachevskiy was the first to disappear (along with the poster) after a "sniper's shot." The portrait of a lean man with an angular face wearing a service-cap with a large bill and with four "diamonds" on the collar-tabs. This was Yezhov, head of the all-powerful NKVD....

A letter containing Stalin's resolution to "look into it" was laid on this "blood-stained dwarf's" desk in the fall of 1937. The letter was written by Brigade Commander Ya.M. Zhigur, instructor at the Higher Military Academy imeni Voroshilov. It was published for the first time in D.A. Volkogonov's book "Triumf i tragediya" [Triumph and Tragedy]:

"It is my conviction that a large number of extremely important matters pertaining to the organization of the RKKA and the operational-strategic use of our Armed Forces were erroneously resolved, possibly even by way of sabotage.... I ask you, Comrade Stalin, to investigate the activities of Marshal Yegorov during his tenure as chief of the General Staff of the RKKA, since he actually bears responsibility for errors committed with respect to preparations for the operational-strategic employment of our armed forces and in their organizational structure.

"I do not know Comrade Yegorov's political past or present, but his practical activities as chief of the General Staff raise doubts."

For a start, Yezhov "checked up" on the author. Zhigur was shot that very year. While the letter was traveling "through the channels," Aleksandr Ilich turned the job over to E.M. Shaposhnikov, new chief of the General Staff of the RKKA. After a short term replacing M.N. Tukhachevskiy as deputy people's commissar of defense (appointed for 2 weeks!) by the commander of the Volga Military District, he left for a new assignment in the Transcaucasus Military District. He assumed command of the district in January 1938. By that time new denunciations had reached "the very top." In one of them a former colleague in World War I branded "right-wing SR" Yegorov as having criticized Lenin himself. This accusation was also introduced at the trial, even though Aleksandr Ilich had never been a "right-wing SR."

Pages From His Biography:

In his youth Yegorov joined the leftist SRs and was elected a delegate to the Central Executive Committee in October 1917. We know that the leftist SRs were included in the first Soviet government. Following their revolt in July 1918, however, Aleksandr Ilich made a complete break with this party. He explained why in a letter to PRAVDA on 18 July 1918: "I categorically protest the criminal act of certain members of the party and leaders of a small extremist group of bourgeois-minded intellectuals, and I am breaking with them entirely. Having experienced the oppressive and burdensome conditions of the last war and possessing combat experience in this respect, I absolutely reject the views of the Central Committee of the party of leftist social revolutionaries on how to conduct warfare and how to organize the army. From the very beginning of the Red Army's establishment I have been solidly behind the system of organizational development implemented by Soviet power."

During the first post-October days Yegorov, elected to the Central Committee of the Soviets of Workers', Soldiers' and Peasants' Deputies from the Western Front's 1st Army, served on the commission for demobilizing the old army, which was headed by N.N. Podvoyskiy. After that, as a member of the Special Commission headed by V.I. Lenin, he was involved in working out the Decree on the Establishment of the Workers' and Peasants' Red Army. In May 1918 he was placed in charge of the Supreme Certification Commission for screening former officers for the Red Army.

It was during this period, in my opinion, that he first demonstrated his abilities as an outstanding military man. In a letter to the chairman of the Supreme Military Inspectorate, Aleksandr Ilich thoroughly analyzed the causes of the Red Army's military failures. The first one on his list was poor command and control and the absence of a unified, overall plan of combat operations.

At that time the Red Army was subordinate to the Operations Section of the People's Commissariate for Military Affairs and the Supreme Military Council. Yegorov named as the prime task the institution of the position of Supreme Commander.

In a memo to V.I. Lenin, chairman of the Council of People's Commissars, Aleksandr Ilich stressed the point that "only a single will can direct operations...." After reading the memo, Vladimir Ilich, who knew Yegorov from his work on the Special Commission, arranged for the immediate dispatch of copies to important military workers. On the copy to the People's Commissariat for Military Affairs he wrote the following: "Give this some thought. Should we not appoint Vatsetis as Supreme Commander"?

A single agency for directing combat operations of the Red Army and Navy, the Revolutionary Military Council of the Republic, was established on 2 September 1918, and order No. 1 named I.I. Vatsetis as Supreme Commander of all the Armed Forces.

The flames of civil war swept over the fields of Russia, and Aleksandr Ilich could no longer remain in Moscow. He requested assignment to the front. One of his petitions was satisfied in September. By order of the Supreme Commander Yegorov was appointed commander of the Southern Front's 9th Army, which was repelling attacks by the Whites in the area of Kamyshin and Novokhopersk.

He himself had immediately to implement the suggestions set forth in the memo to V.I. Lenin, since the 9th Army was most in need of the strong hand of an army commander, of firm and continuous command and control of operations which were essentially those of the partisan detachments of Kikvidze, Sivers, Mironov and others, numbering divisions, brigades and regiments. "It took an extraordinary effort," Aleksandr Ilich recalled, "to bring those partisan detachments not just into submission and subordination to a single will, but also in some way to give them the appearance of regular units."

Yegorov was appointed commander of the 10th Army in December 1918 and commander of the 14th Army in July 1919. He was placed in command of the Southern Front at the beginning of December 1919. This front had become

the main front in the republic by then. In four and a half months the forces commanded by Yegorov moved from Orel to the shores of the Black Sea, routing Denikin and capturing 45,000 prisoners, 1,100 guns, 1,450 machine guns and 11 tanks. The All-Russian Central Executive Committee of the RSFSR awarded him the Honorary Revolutionary Weapon for his exemplary accomplishment of combat missions as commander of the front.

On 21 February 1938, a month after Yegorov assumed command of the Transcaucasus Military District, Voroshilov summoned him to the People's Commissariat of Defense. Following his arrival in Moscow Aleksandr Ilich rested up for a time at the Arkhangelskoye Sanitorium. In April (date unknown) he disappeared without a trace from his apartment in building No. 80 on Vorovskiy Street.

...18 years went by, and Yevgeniya Ilinichna Perova, Yegorov's oldest sister, who lived in Leningrad, wrote to the person who had summoned the marshal to Moscow by telegram: "I appeal to you for help in determining the state of health and the whereabouts of my brother, MSU Yegorov, who was arrested in 1938, since there is some evidence that he has been rehabilitated. I do not know how to contact him and possibly see him.... Perhaps he is very ill, in which case I shall care for him." The letter was written by someone else, since Yevgeniya Ilinichna, born in 1882, signed it with printed letters.

A second sister of the marshal, Natalya Ilinichna, appealed also to him, to Voroshilov, chairman of the Presidium of the USSR Supreme Soviet at that time: "Comrade Voroshilov, let me know whether my brother, Marshal Yegorov, is alive or not. I sent a registered letter to You, Comrade Voroshilov, but I have still received no reply. Please do not refuse my request. Buzuluk, 3rd Line, 27—9/22/1956."

The "first marshal" did not reply either to Aleksandr Ilich's sisters or to his daughter, Aleksandra Aleksandrovna Kuznetsova. His wife, Galina Antonovna, was no longer alive. She died, slandered, in prison.

Following the denunciation by Zhigur and others, Yegorov was removed as a candidate member of the Central Committee on 2 March 1938 by a written poll of members and candidate members of the VKP(b) [All-Russian Communist Party (of Bolsheviks)] Central Committee. The matter was decided in advance within the "narrow circle" of Stalin, Molotov and Voroshilov.

Lt Gen A.I. Todorskiy, who served under Aleksandr Ilich's command in the Red Banner Caucasus Army in the '20s, later recalled that when "Yegorov's case" was considered at a Politburo session, Stalin spoke out sharply against the marshal, using "facts" set forth in letters from slanderers.

Yegorov's expulsion was justified by the statement that "his confrontation by arrested conspirators Belov, Gryaznov, Grinko and Sedyakin showed him to be politically more sullied than one would have thought prior to the confrontation."

Also taken into account was the fact that "his wife, born a Peshkovskaya, with whom Comrade Yegorov lived in harmony, has actually been a Polish spy for a long time."

On 16 March 1939 V. Ulrikh, military lawyer and chairman of the Military Bar of the USSR Supreme Court and Stalin's tragically famous butcher, wrote the "leader" that the cases of 436 people had been considered at sessions of the Military Bar between 21 February and 14 March 1939, 413 of whom were condemned to death. Ulrikh reported to Stalin that the condemned had fully admitted their guilt. Yegorov's name was on the list....

With perfectly understandable excitement I held in my hands the file on the rehabilitation of MSU A.I. Yegorov.

This is from the decision rendered by the USSR Supreme Court on 14 March 1956: "The 22 February 1939 verdict rendered by the Military Bar of the USSR Supreme Court in the case of Aleksandr Ilich Yegorov is rescinded on the basis of newly revealed circumstances, his case is to be halted in accordance with Paragraph 5, Article 4, of the Code of Criminal Procedure of the RSFSR, and he is to be totally rehabilitated due to the absence of a corpus delicti."

Just what did the unjust court accuse the marshal of? We learned that A.I. Yegorov was sentenced under articles 58-1b, 58-8 and 58-11 of the Criminal Code of the RSFSR to the maximum punishment, execution. The military bar found him guilty at that time of allegedly joining the party with a dual purpose and in 1919 establishing criminal ties with S.S. Kamenev and P.P. Lededev, leaders of an anti-Soviet organization, as well as with Trotskiy, at whose assignment he attempted to thwart Stalin's plan for routing Denikin. In 1928 he established ties with Rykov and Bubnov and at their assignment set up an anti-Soviet organization of right-wingers within the RKKA. In subsequent years, the sentence states, Yegorov established contact in the anti-Soviet work with Tukhachevskiy and Gamarnik. In 1931, while studying in Germany, he established espionage relations with the German general staff and became an agent of Polish intelligence at Rykov's assignment in 1934.

Further investigation of the case conducted in 1956 established the fact that Yegorov had been unjustifiably accused of heinous state crimes based on falsified information.

During the investigation, he allegedly indicated that he had been linked to Gamarnik in anti-Soviet work in the RKKA. We know, however, that Gamarnik committed no crimes whatsoever and has now been fully rehabilitated.

The materials from the unjust court further state that Yegorov allegedly maintained close ties with a number of other highly placed military men in his criminal activities. The individuals they names, however, were members of the Special Office of the USSR Supreme Court's Military Bar when it considered the case of M.N. Tukhachevskiy and other military leaders.

An inspection of the materials on the "Bubnov Case" clearly showed that Sergey Andreyevich had in no way testified against Yegorov.

With respect to other evidence such as Zhigur's letter, a thorough investigation showed that it was all slander from beginning to end.

Based on the many documents pertaining to the repression of command cadres, there is every basis for stating that Stalin was personally interested in removing and physically destroying those who were well acquainted with his "military leadership" during the civil war. It was in great part his fault as a member of the military council of the Southwest Front (A.I. Yegorov, commander), that the Supreme Commander's order that reinforcements be brought up to help the Western Front was not carried out in good time, as a result of which the offensive undertaken against Warsaw in 1920 failed. Marshal Yegorov, better than anyone else, knew this perfectly well.

Aleksandr Ilich's tragic fate is one more piece of evidence Stalin did not believe that destroying the most experienced military cadres would weaken the army and navy. One has to be horrified to learn the extent of the gap knocked in the command cadres at that time. Stalin was not horrified. He was not frightened by the fact that more than half (55%!) of the Red Army's command and political staff, from the regimental level on up, were killed. Even the school kids today know what that cost us in June 1941.

Half a century has gone by since Aleksandr Ilich's death. An executioner's bullet interrupted his life on Red Army Day, of which he was one of the founders. The people's memory of MSU A.I. Yegorov is alive, however, and will continue to live.

Delivery Of Air Defense Version Of F-16 Noted

90UM0011A Moscow KRYLYA RODINY in Russian No 9 Sep 89 (Signed to press 16 Aug 89) p 27

["F-16 For Air Defense"]

[Text] The first of 270 of the United States' latest air defense fighter, the F-16ADF, arrived at Kingsley Field in Oregon in May of this year. The fighter is essentially a variant of the F-16B, which is in regular production. Eleven squadrons of the country's National Guard will be equipped with this type of aircraft. The first squadron is to be brought up to full strength by late summer of 1989, and the rest will be organized by July 1993. The F-16ADF aircraft will replace the Convair F-106 and the McDonnell Douglas F-4 with which air defense squadrons guarding the continental territory of the United States are currently equipped.

The ADF aircraft differs from all previous variants of the F-16 in that it has searchlights as part of a nighttime target identification system, the GPS satellite navigation system, more effective means of cooling electronic equipment, and a target illumination system that operates in continuous-wave regime. The new fighter's armament will consist of two Sidewinder air-to-air missiles and two Sparrows. In the future, the more advanced AMRAAM missile, now under development, might also be used on the F-16ADF.

The foreign press notes that the United States, having initiated the F-16 program in the first half of the 1970s, is persistently developing it. Now not only the General Dynamics concern, which developed the machine, but also Western European countries, where the aircraft is manufactured under license, are carrying out a whole series of measures to continually enhance the aircraft's combat effectiveness. The number of aircraft of this type being produced is also increasing. Aviation Magazine recalls that while the program originally called for building just 1,000 F-16s, including 400 for the US Air Force, more than 3,000 machines had been ordered as of March 1989, 2,270 of which had already been delivered. The US Air Force has received 1,425 aircraft, Western European countries almost 460, Israel 150, Egypt more than 80, Pakistan 40, and so on.

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Development Of US Expermental Fighter 'X-31'

90UM0011B Moscow KRYLYA RODINY in Russian No 9 Sep 89 (Signed to press 16 Aug 89) p 27

["The 'X-31' Experimental Fighter"]

[Text] The US Defense Department, the US Naval Aviation Systems Command, and the FRG Ministry of Defense are financing the development, by the American firm Rockwell International and the West German firm Messerschmidt-Boelkow-Blom, of the experimental, supermaneuverable X-31 fighter. Two experimental X-31 aircraft are being assembled at the Rockwell plant in Palmdale. Their first flight is slated for November of this year.

The fighter is supposed to be controllable in supercritical regimes at very large angles of attack, which is considered an extremely important condition for victory in air combat. The engine thrust control system will allow course and spatial control of the aircraft in conditions of ineffective aerodynamic control surfaces at supercritical regimes. The system includes three flaps that can deflect the exhaust gas stream by 10 degrees pitch and yaw.

The set of aerodynamic control surfaces, which are linked by a pilot computer, includes canards with a 90 degree turning angle, elevons on the ends of the wing consoles, and flaperons on the trailing edge. An F-404 engine with 5,500 kilograms of thrust has been installed in the experimental aircraft. The cockpit fairing, ejection seat, and instrument panel are from the F-18 fighter, the chassis from the F-16, and the pilot computer from the NTT flying bedstead.

The test-flight program for the prototype X-31 aircraft will cover a two-year period.

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Specifications Of Tornado Variants

90UM0011C Moscow KRYLYA RODINY in Russian No 9 Sep 89 (Signed to press 16 Aug 89) pp 28-29

[Article by V. Yeniseyskiy: "'Tornado' Variants"]

[Text] The Western press has widely noted the 20th anniversary of the Panavia consortium. It was created by Britain, the FRG, and Italy under an intergovernmental agreement to develop and mass-produce the all-European MRCA fighter, now known as the Tornado. By spring of this year the consortium had already delivered to customers more than 750 machines in two variants, the multipurpose Tornado IDS, and the long-range Tornado ADV interceptor. There are orders for 300 almost more aircraft. In addition to the main customers—the British, FRG, and Italian air forces, orders for the Tornado have been placed by Saudi Arabia and Jordan.

Prior to 1983, the consortium's enterprises produced the Tornado only in the multipurpose fighter variant. In 1984, production of the ADV variant got under way, for the time being only for the British Air Force, though there are contracts for supplying these machines to Oman and Saudi Arabia. Another, third variant—the Tornado ECR, for waging electronic warfare—has been developed and is being readied to go into production late this year.

All the variants of the heavy Tornado fighter have variable wing configuration. The sweep angle can be altered within a range of 25 to 68 degrees. The maximum wing span is 13.9 meters, the minimum wing span 8.6 meters. The length of the aircraft's IDS variant is 16.7 meters, the ADV variant 18.1 meters. The multipurpose IDS is equipped with two Rolls-Royce RB199 Mk. 105 bypass turbojet engines with a maximum thrust of 8,200 kilograms each. Its armament consists of two built-in 27-mm Mauser cannon and underwing and ventral struts to support various weapons, including Sidewinder or Aspid air-to-air

missiles, HARM or ALARM antiradiation missiles, and Sea Eagle or Cormoran antiship missiles, as well as cluster bombs to be dropped at low altitudes. The maximum combat payload is nearly 8.2 tons. The takeoff weight of the Tornado IDS can range up to 26.5 tons. Its maximum speed at low altitude is 1,480 kilometers per hour, and its combat operating radius is 1,390 kilometers.

The Tornado ADV interceptor is manufactured with RB199 Mk. 104 engines with a thrust of up to 7,830 kilograms each. A long-range radar is mounted on the somewhat elongated nose section of the fuselage. The aircraft has more sophisticated electronic equipment, in particular data processing systems, color displays, and an onboard computer with a large memory. In accordance with its main combat function, it also has a different armament composition. Only one 27-mm cannon is mounted on it, while the external stores are outfitted with four Sky Flash air-to-air missiles with a range of 50 kilometers and two Sidewinder missiles for combat at distances of 15 to 16 kilometers. Plans call for arming the interceptor with the more advanced AMRAAM and ASRAAM type missiles. The aircraft is designed for a G-load of 7.5. Its maximum takeoff weight is 27.9 tons, its flight speed corresponds to the number M=2.2, and its intercept radius at supersonic speed is 550 kilometers.

The third Tornado variant, the ECR, is intended primarily for West Germany. The command of the FRG Air Force has ordered these aircraft to replace the aircraft it currently uses for this function—the F-4C Wild Weasel (a variant of the Phantom). The Tornado ECR will have equipment that will enable it not only to search for the enemy's electronic equipment and to identify it, but also to destroy these targets when necessary. Its weapons complement therefore includes HARM missiles, and two cannon and air-to-air missiles for defending against and repulsing interceptor attacks. Jane's Defence Weekly recently reported that the US Air Force is also interested in the Tornado ECR variant. According to the weekly, the US Air Force proposes to order at least 120 machines of this type to replace its Wild Weasel F-4G aircraft.

Jane's Defence Weekly recently reported that a variant of the fighter that has been designated the Tornado GR. 4 is to take to the air in late 1991. It is a modification of the IDS aircraft. The journal says that all 229 machines of this type in the British Air Force will eventually be refitted. After modification, they will be able to execute attacks at night and in poor weather conditions.

In the design of the GR. 4, plans call for using elements of low signature technology, equipping the aircraft with the FLIR system, which can detect targets in a heat band, and having the pilot use night-vision glasses.

Officials of the Panavia consortium believe the Tornado aircraft can remain in service for another 25 to 30 years. They are therefore keeping them in regular production and are studying the possibility of producing new variants, in particular for Britain, which plans to retire its obsolete deck-landing Buccaneer aircraft in the 1990s. Britain

intends to select a Tornado variant as the Buccaneer's replacement in combating water-surface targets.

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First Flight Of F-15 SMTD Noted

90UM0011D Moscow KRYLYA RODINY in Russian No 9 Sep 89 (Signed to press 16 Aug 89) p 29

["Short Takeoff and Landing F-15"]

[Text] A demonstration model of the short takeoff and landing F-15 SMTD equipped with a power plant and flat nozzles made its first flight recently. The aircraft was built specifically for the purpose of devising technical improvements that, in the future, can be used to develop promising fighters under the ATF program.

The McDonnel Douglas firm received a \$118 million contract to build and test the F-15 SMTD in 1984. The experimental machine was built in the spring of 1988, and it flew in September 1988. The very first variant had two Pratt & Whitney F100-PW-220 turbojet bypass afterburner engines with ordinary nozzles. As the magazine FLIGHT INTERNATIONAL reports, after testing at Edwards Air Force Base, the aircraft was returned to the plant in St. Louis for installation of the new nozzles.

In the course of a three-month period, the aircraft's features changed. During this time, in addition to the new nozzles, more advanced equipment was installed in the aircraft, specifically an electronic remote control system. Testing of the F-15 SMTD with flat nozzles will take 110 flying hours and be completed in early 1990.

In the designers' view, the use of flat nozzles will make it possible to significantly improve the fighter's flight maneuverability. In practical terms, this is achieved by deflecting the thrust in a vertical plane to an angle of plus or minus 20 degrees. Both the upper and lower horizontal planes of the nozzles will be deflected.

In order to improve control characteristics with respect to rolling, plans call for diverting the gases into deflector grids situated above and below the flat nozzle tubes. (Incidentally, at present abroad there is only one aircraft, the British Harrier, that can change its thrust in flight.) In addition to enhanced maneuverability, the flat nozzles, by diverting thrust on takeoff and landing, will ensure a substantial reduction in the length of the takeoff and landing runs.

Flight tests on the F-15 SMTD aircraft call for testing the possibilities of operating the aircraft with maximum takeoff weight from wet 460-meter runways with a cross wind of 55 kilometers per hour at night, as well as in conditions of 300-meter runway visibility.

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Viktorov Commentary on U.S.-Japanese 'PACEX-89'

90UM0005A Moscow KRASNAYA ZVEZDA in Russian 15 Sep 89 First Edition p 3

[Article by V. Viktorov: "Within the Framework of PACEX-89"]

[Text] According to a report in the ASAHI newspaper, the American nuclear aircraft carrier Carl Vinson, two other aircraft carriers, the Midway and Ranger, approximately 40 other combat ships, 300 aircraft, and a total of 45,000 servicemen will take part in major Japanese-American exercises. These exercises should begin on 29 September in areas adjacent to the Japanese Island of Hokkaido which is near the territory of the Soviet Union. These exercises will become an integral part of PACEX-89, a large scale militaristic demonstration being conducted in the Pacific Ocean at the present time under the aegis of the Pentagon.

We all know that the United States had already begun preparations for conducting PACEX-89 over a year ago and has surrounded it with a thick curtain of secrecy. According to the ASAHI newspaper, this is primarily explained by the fact that Washington is afraid of arousing a "negative reaction" from international society by organizing such unprecedented military maneuvers during a period of reduced tensions. Just prior to the start of the maneuvers, the Pentagon announced that they will be conducted "throughout the entire Pacific Ocean area during September and October."

The ASAHI thinks that not only naval, and air forces but Army and Marine forces will also participate in PACEX-89. Four carrier groups, nearly 500 aircraft, a Marine division, and two Army divisions are involved in these maneuvers. Besides the U.S. and Japan, the armed forces of Canada, the Philippines, Australia and possibly Thailand and South Korea are participating in PACEX-89.

It is indicative that the Japanese Self-Defense Forces Agency (JSDF) continues to maintain total silence regarding "self-defense forces" participation in PACEX-89. And this is not by chance. It can be assessed as a violation of the generally accepted interpretation of the ronstitution which bans Japan from participating in collective defense and even more so in the collective offensive operations that they intend to conduct within the framework of these maneuvers. A JSDF spokesman whom we asked to comment on the ASAHI newspaper's report said only that "no official announcement about Japanese participation in PACEX-89 had been made" and the question of conducting Japanese-American exercises "is being studied."

Furthermore, the ASAHI emphasizes that participation of three branches of the Armed Forces constitutes U.S. and Japanese Armed Forces joint operations and they will become one of the main elements of the PACEX-89 maneuvers. The newspaper thinks that there is a proposal for American aircraft carriers to use the port of Tomakomai (Hokkaido) "in emergency situations" which is also

the main arena of this joint militaristic rehearsal. Carrier aircraft will strike Sakhalin and the Soviet Primorya. Let us add to this that PACEX-89 scenarios envision, among other operations, a "blockade" of Kamchatka and "occupation" of the Kurile Islands.

The press asserts that Washington's decision to conduct the PACEX-89 maneuvers and Japanese-American training exercises within their context is caused by its attempts to transfer a portion of that role which the American military presence has been directly providing until the present time to its Allies in the Asian-Pacific Ocean Region. Washington obviously wants to strengthen military ties with its Allies, thus strengthening its own military presence in the Asian-Pacific Region.

NATO Naval-Nuclear Superiority, 'Autumn Forge-89'

90UM0005B Moscow KRASNAYA ZVEZDA in Russian 17 Sep 89 First Edition p 3

[Article by V. Pustov, KRASNAYA ZVEZDA commentator: "To the Detriment of Trust"]

[Text] It seems that certain Western politicians, and some quite prominent ones at that, at times act in accordance with the saying "Better late, than never." And this really can be better especially if common sense prevails. And we are not talking about secondary issue but about recognition of very important political realities by them, although they may have been in the twilight of their state activities or had already retired. Thus, former British Prime Minister W. Churchill, one of the initiators of the "Cold War," spoke out against nuclear war in the twilight of his life by warning that England would be a target of it. U.S. President D. Eisenhower, whose foreign policy was based on the principles of "from a position of strength," while leaving the White House warned the public of his nation about the dangerous growth of influence of the military industrial complex. U.S. Secretary of State J. Dulles, the moving spirit and conductor of the policy of "balancing on the edge of war," finally acknowledged that the policy of "rejection of communism" was ineffective and essentially unsound.

And here is an example in our times. W. Colby, notorious former director of the U.S. CIA, is publicly expressing doubt about the need for NATO's current strategy which envisions inflicting a nuclear first strike.

Not only "former" leaders are directing attention to the danger of existing military doctrine and strategy in the North Atlantic Alliance. Many authoritative Western political and public figures, scholars, and military experts are warning that the realization of NATO strategic tenets are fraught with the threat of apocalypse, including a nuclear holocaust.

However, those who determine and conduct the military policy of the North Atlantic Bloc remain deaf to the ever louder rational warning. The currently ongoing Autumn Forge-89 NATO maneuvers are the latest graphic example.

About 20 major combined arms, air, and naval training exercises are conducted within the framework of these maneuvers on a broad expanse from Northern Norway to the eastern borders of Turkey, from Gibraltar to the Elbe, and also in the ocean and sea waters contiguous to the continent. It is still early to talk about their specific course and results but it is already clear right now that, as in Autumn Forges of previous years, the current militaristic games are distinguished by their offensive and provocative nature. And not only because they are conducted in the immediate proximity of borders of Warsaw Treaty member states. Concentration of major forces there and the nature of the missions being carried out also make the current Autumn Forge maneuvers hard to distinguish from deployment of strike groups for actual combat operations.

The missions being carried out at such maneuvers in recent years, which invariably arise from the American concept of the "Airland Battle," obtained the title of "combat with the second echelon (reserves)" concept at NATO headquarters. Here the leading role is assigned to strike aircraft and combat helicopters, that is, to forces in which NATO has a significant advantage over the Warsaw Pact. The essence of the concept consists of inflicting surprise mass bombing strikes during short periods of time against groups of forces-against second echelons and reserves prior to their commitment to the battle and also on important targets in the Warsaw Pact Countries' rear areas in order to achieve decisive success during operations in the initial period of the war. We must also not forget that concentration of attention on realizing this concept with massive use of the latest precision-guided weapons does not signify NATO doctrine's renunciation of inflicting a nuclear first strike.

During the current maneuvers, special significance is being attached to maritime operations in which up to 400 ships are participating. Operations are being conducted in accordance with the concept of "forward maritime positions." They are attempting to portray it as "forward defense" at the Pentagon and at NATO Headquarters. And this when the concept envisions such measures as creating a nuclear missile threat to the Soviet Union and other WTO countries from maritime axes by deploying surface combatants equipped with Tomahawk long-range cruise missile carriers at these positions; timely concentration of major U.S. Naval battle groups in forward sea and ocean areas; and, concentration of highly maneuverable groups of ships at strategically important channel, coastal, and other zones.

Aircraft carriers and other surface ships and submarines of the NATO strike fleet and the U.S. 6th Fleet are being concentrated in the Barents, Norwegian, and North Seas, west of the English Channel, and in the eastern part of the Mediterranean Sea. According to the scenario of American and NATO strategists, naval bases and other important defensive facilities, as well as second echelons of forces and reserves on maritime axes must be subjected to carrier aircraft and Tomahawk cruise missile strikes with nuclear and conventional warheads. A blockade of Soviet surface ships and submarines in international straits is envisioned along with surprise strikes on naval bases.

The aggressive direction of all these operations is also emphasized by the fact that they are being planned and worked out during the course of exercises taking into account NATO's substantial superiority in naval forces. That same superiority that the NATO military political leadership completely refuses to part with. The U.S. and other leading participants of the North Atlantic Alliance, as they are called, immediately reject on forced pretexts the reasoned proposals set forth by the Soviet Union and its Allies to conduct negotiations to reduce naval forces and primarily long-range sea-based cruise missiles which are one of the most dangerous types of offensive strike weapons adapted for surprise attack. Moreover, the U.S. is carrying out plans to equip nearly 200 ships with thousands of Tomahawk [cruise] missiles.

Proceeding from those same views of power politics, the NATO powers are rejecting constructive proposals on establishment of a nuclear-free zone in Northern Europe, on reduction of military activity and limiting the scale of naval and air force activity in the waters of the Baltic, North, Norwegian, and Greenland Seas, and on the withdrawal of the USSR and U.S. Fleets from the Mediterranean Sea. These regions, both in the past and in the present, are primarily viewed as potential theaters of combat operations at NATO Headquarters and at the Pentagon.

Large-scale military activities such as the Autumn Forge maneuvers reveal the hypocritical essence of the Atlantic Bloc member's unsubstantiated assurances on the NATO Bloc's adherence to the idea of strengthening peace and international security. These actions radically contradict confidence building measures between nations and peoples and it is appropriate to mention that the next round of talks of the "Thirty Five" and also talks of the "Twenty Three" on reductions of conventional arms and armed forces have recently begun in Vienna. The increase of military activity in the western part of our continent in no way coincides with positive changes in relations between NATO and the WTO and with the increase of confidence in the foreign policy of the Soviet Union and other socialist countries which is occurring in the West. References by our opponents to the offensive direction of the military doctrines of the USSR and the Warsaw Treaty Organization are now quite senseless. Understanding is also growing that no "hand of Moscow" is to blame for regional conflicts which are far from our country.

These occurrences are perceived quite differently on both sides of the Atlantic. As MEMENTO GRIP, the annual published in Hungary, points out, during 1989 American leaders and experts "are strongly irritated by any review of the significance of the Soviet threat conducted by their Allies and by the latter's reluctance to deploy new weapons systems... They obviously fear that a re-evaluation which reduces this threat could result in a split among the Allies and consequently could undermine American leadership."

It is obvious from the annual's statements that advocates of deploying forces at forward positions are pursuing a dual purpose: To call to order NATO European countries which are manifesting obstinacy and to apply pressure on the Soviet Union. I will not dare judge to what degree Washington's scheme will succeed in relations with its European partners on this score. As for the extremely ambitious attempts to affect the USSR "from a position of strength," there is only one thing to say: This is a futile undertaking.

Rabin Visit, U.S.-Israeli Military Agreement

90UM0005C Moscow KRASNAYA ZVEZDA in Russian 29 Sep 89 First Edition p 3

[Article by V. Viktorov: "The Next Stage"]

[Text] It has already become an evil tradition for Arab States. During nearly every visit of the Israeli Defense Minister to the United States, signing of some American-Israeli document takes place that increases military cooperation between the two countries with its cutting edge directed against the Arabs at a yet higher level.

The latest voyage of Y. Rabin, Israel's minister of defense, occurred at the beginning of this month and was not an exception. According to THE WASHINGTON POST, the U.S. and Israel concluded an agreement during his stay in Washington in accordance with which the American Administration will "lend" Israel military equipment and materials to conduct military research and development. The newspaper considers this very unusual agreement to essentially supplement a bilateral memorandum of strategic cooperation and it will become the basis for yet another form of American military aid to Israel which already approaches two billion dollars per year.

It is significant that both parties agreed not to report anything about the signed document due to fears that it "would cause dissatisfaction among the Arab countries." However, the Pentagon nevertheless made a decision to disclose the "general content" of the agreement. It had to resort to this step because a report appeared in the Israeli press that, during the course of talks conducted in Washington, Y. Rabin allegedly managed to get approval from the Bush Administration to station 100 million dollars worth of American combat equipment in Israel. Pentagon spokesmen stated that this was not entirely the case and added that the decision regarding what "equipment and materials will be loaned" to Israel has still not been made.

As for stationing American combat equipment on Israeli territory, we know that the U.S. is already establishing equipment storage facilities in Israel in connection with the aforementioned memorandum on strategic cooperation. The equipment will be used by the Pentagon in the event of an "emergency situation" in the Middle East. At the same time, Israel itself will have access to it in the event of an outbreak of combat operations.

Obviously, the Israeli press simply was in a hurry to report it.

Western Artificial Intelligence Systems For Military Uses

90UM0017A Moscow KRASNAYA ZVEZDA in Russian 4 Oct 89 First Edition p 3

[Article by V. Frolov, Candidate of Technical Sciences: "Military-Technical Survey: 'Smart' Weapons"]

[Text] In recent years, the problem of creating "artificial intelligence" or "intellect" has captivated not only mathematicians and engineers but also specialists in the humanities. The interests of all fields of human knowledge are focused in this problem. And not surprisingly: For it is at this "cutting edge" of scientific and technical progress that a forthcoming breakthrough—the reaching of a qualitatively new level—is expected. Nor have military specialists remained on the sidelines. The Pentagon has shown heightened interest in research in this field and launched a long-term program, spanning the period up to 1993, to develop "smart weapons."

1. "Artificial Intelligence" Systems For Ground Forces. The growing sophistication of modern weapons systems and the constantly increasing volume of command and administrative information coming into army staffs give rise to numerous problems. For example, the personnel of a typical command post process thousands of pieces of information per day (and this is hardly in an emergency situation). Despite such large quantities of information and rigid time constraints, a combat mission must be carried precisely on schedule. Today it is necessary to take decisions far more quickly and to maintain the combat readiness of units despite limits on (and sometimes a shortage of) personnel and their professional experience.

In the view of foreign specialists, computerized management systems can help to solve many of these problems. Proceeding from this premise, the US Army has put together a long-term program for research and development in the field of "artificial intelligence" systems. The program is being carried out in conjunction with two large American universities, those of Texas and Pennsylvania. A special Center for Artificial Intelligence Systems has been set up in the Pentagon. One of the problems the center is working to solve is that of the rational distribution of the most important types of fundamentally new radio equipment that is resistant to jamming and various types of physicial effects that are inevitably present in an actual combat situation.

The new radio systems are linked to a single network that has a honeycomb structure, which creates an overlapping radio field. This field makes it possible to "lock onto" topographical reference points with pinpoint accuracy and enhances the reliability of fire control. Other important programs have to do with planning the location of highly sensitive sensors and with analyzing potential threats from the enemy. Priorities have been set as well.

One top-priority task entails the development of combat vehicles that can detect, independently or by remote control, a camouflaged enemy, disarm mine fields and unexploded ordnance, or fire missiles even in situations that are unsafe for personnel.

The following is how the American magazine U.S. NEWS & WORLD REPORT describes the battlefield of the future:

"Radio signals from communications satellites have warned the commander of an impending enemy offensive. A network of seismic sensors several meters underground has confirmed this. Registering ground vibrations, the sensors have sent the data to the staff computer in the form of coded signals. The latter now knows fairly accurately where the enemy tanks and artillery are. The sensors have quickly filtered the acoustic signals from military hardware of varying mass, distinguishing artillery from armored personnel carriers on the basis of a vibration spectrum. Having established the enemy's disposition, the staff computer takes a decision to launch a flanking counterstrike... The field ahead of the attackers is mined, and the enemy has tried to create a narrow corridor. However, the computer proves more clever. With an accuracy to within thousands of a second, it determines which of the mines should detonate. But that's not all: Miniature bounding mines have blocked the path of retreat to the enemy's rear. After bounding, these mines begin moving in a zigzag pattern, exploding only when they recognize, from a metal mass, that they have hit a tank or artillery piece. At the same time, a swarm of small kamikaze aircraft attacks the target. Before striking, they send to the staff computer a new portion of information on the state of affairs on the battlefield... Those who manage to survive this hell will have to contend with robotsoldiers. Each one, "sensing" the approach of a tank, for example, starts sprouting like a mushroom and opens its "eyes" in an attempt to find it. If the target doesn't appear within a radius of 100 meters, the robot heads toward it and attacks with one of the small missiles with which it is armed..."

Foreign specialists see the future of military robotics primarily in the development of combat vehicles capable of operating with a high degree of autonomy and of "thinking" independently. Among the initial projects in this field one could cite the army autonomous transport vehicle, the ATV. The task of this computer laboratory is to test methods of autonomous computer control of ground weapons. For orientation the ATV uses several television cameras, an ultrasonic position finder, and variable-wave lasers, which combine the collected data into a kind of clear "picture" of not only what's ahead but also about.

The device is supposed to have the capability to distinguish between shadows and real obstacles—for a television camera with computer control, the shadow of a tree is still very similar to a fallen tree. The ATV is already capable of moving around small obstacles, but only at a speed of no more than 10 kilometers per hour. At higher speeds, the computers are simply unable to process the data and make the correct decision quickly enough.

Testing is currently under way of higher-speed onboard computers with parallel signal processing. Ultimately, assessing not only obstacles but also potential threats and locating targets with simultaneous movement at a speed acceptable in combat conditions will require far more powerful computers. Since supercomputers with fantastic rapid response have yet to leave the the research laboratories, the US Army command is forced to content itself with less.

The development of semiautomatic robots capable of performing limited tasks is considered an intermediate step. Newsday magazine reports that the possibilities are being tested of a so-called "combat vehicle dispersion system" in which one device performs command and control functions (several people are inside it) and goes out on the battlefield with a group of robots.

Another military robot, known as Odex, can load and unload artillery shells and other ammunition, carry loads of more than a ton, and outflank secured lines. A Rand Corporation analysis indicates that, according to preliminary estimates, each such robot will cost \$250,000 (for purposes of comparison, the main tank of US ground forces, the Abrams M-1, costs \$2.8 million).

Great attention is being devoted abroad to the development of "expert systems" consisting of a computer system that draws on the knowledge and reasoning of a highly skilled specialist (expert) to solve various tasks. One such device is an experimental model known as BATTLE. It performs the task of dispersing weapons among targets by working through all the options in a so-called "search tree."

The BATTLE system makes it possible to take into account 55 different factors that are important in actual battle (the range and location of weapons, the degree of combat readiness of personnel, the possibility of counterbattery fire, the organization of reinforcements, ammunition supplies, the number of tubes per group, the combat experience of the opposing enemy group, the technical condition of available equipment, the degree of readiness of a replacement gun crew and its physical condition).

In the first stage of solving the task, a computation is made of the operational effectiveness of each individual weapon—say, a rocket launcher—with respect to an individual target. In the second stage, the overall correspondence of all weapons to all targets is assessed.

In an actual combat situation, situations are possible in which an expert system will not have the required information to make a correct response. In such cases, the computer system itself is to ask questions of the user in the form of text on a display or in a voice produced by an acoustic synthesizer. As the foreign specialists point out, however, the possibilities of such a dialogue on the battle-field are sharply limited.

In articles on this problem, the foreign press points out that the realization of any given expert system is more of an art at present, and that no reliable universal methods can be proposed here. Specific supplements and alternative solutions (of the "evaluative functions" strategy type) are required to carry on a rational dialogue and to close off unpromising branches of the "search tree." Foreign military observers conclude that the task of dispersing weapons among targets is essentially one of distributing resources, and it can find useful application in other "subject areas"—in the air force and navy, for example.

Proximity Of NATO 'Display Determination-89' Exercise Noted

90UM0017B Moscow KRASNAYA ZVEZDA in Russian 4 Oct 89 First Edition p 3

["Display Determination-89"]

[Text] The NATO joint armed forces' Display Determination-89 exercises in the Southern European theater of military operations have ended.

The second ("Turkish") stage, which was held from September 22 to October 3, involved practicing the transfer of American reinforcement troops from the United States to Turkey and combat operations by a grouping of ground forces created in that region, in close cooperation with tactical aviation and naval forces. The American transport ships Antares, Altair, and American Eagle delivered a total of nearly 900 units of tracked and wheeled equipment of a mechanized US division to the Turkish ports of Bandirma and Derince. Twelve A-10 fighters were moved from the American continent to the air force base at Bandirma. The main efforts of NATO's strike and joint naval forces in the theater of military operations were aimed at expanding a zone of domination into the eastern part of the Mediterranean Sea, defending a sealift of amphibious-assault units, and carrying out a large-scale assault operation on the northwestern coast of Turkey in the Gulf of Saros.

Special importance was attached to the "Turkish" stage of the exercises, as it took place in direct proximity to the borders of the People's Republic of Bulgaria and the USSR. It was apparently no accident that the exercise area was visited during this stage in particular by American General Galvin, Supreme Commander in Chief of NATO Joint Armed Forces in Europe, and by American Admiral Howe, Commander in Chief of NATO Joint Armed Forces in the Southern European theater of military operations.

Gontar on U.S. Nuclear Weapons Modernization 90UM0077A Moscow TRUD in Russian 6 Oct 89 p 3

[Article by Major General F. Gontar, candidate of military science: "While the Negotiations Are Going On"]

[Text] I want to begin by establishing an important and gratifying fact: The process of practical disarmament is actually going on. Based on the Soviet-American Treaty on Elimination of Medium and Shorter Range Missiles (INF) which was concluded in 1987, the Soviet side has already eliminated two types of shorter range missiles (the OTR-22 and ground-based cruise missiles) and the American side has eliminated the Pershing-1A. Both

states are continuing the destruction of their medium range missiles which must be completed by 1992.

Progress in carrying out the treaty mentioned above has instilled the hope in proponents of disarmament that the negotiations being conducted on a 50 percent reduction in strategic offensive weapons, on a nuclear test ban, on a ban and elimination of chemical weapons, and reduction of conventional arms and armed forces in Europe will be more successful and an understanding may be reached on these issues in the very near future. Unfortunately, not everything is occurring as we would like it to although reassuring progress has been noted quite recently.

We might want to look for an answer to the question of why the previously mentioned negotiations have not been very successful in recent days. And here this important circumstance draws attention to itself: The U.S., not manifesting undue haste in disarmament matters, has not canceled even one of its military equipment programs and is planning an intensive increase in production of the latest nuclear missile weapons not only during the 1990's but also in the beginning of the 21st Century.

For example, let us take the Pentagon's plans to modernize the entire nuclear weapons suite, the main directions of which were published abroad in Report-2010. According to the report, total expenditures of 250 billion dollars are envisioned for nuclear rearmament. Let us appreciate the value of this figure. Consequently, the U.S.'s annual expenditures on development and production of new nuclear warheads during the next 20 years will average 1.5 times more than in the current financial year.

I will emphasize that the existing nuclear arsenal in the U.S. already totals approximately 30,000 warheads and about half of them are strategic weapons. About 2,000 warheads of the latest design annually enter the inventory as replacements for obsolete munitions.

In what specific directions is the Pentagon planning radical modernization of nuclear forces in order to strengthen the potential of a "disarming" first strike? Fifty new highly accurate MX Peacekeeper Missiles have already been deployed into the intercontinental ballistic missile (ICBM) forces. Each such missile contains 10 individually guided 600 kiloton warheads. They are capable of destroying small targets with practically any degree of hardening. They are planning to deploy 100 MX ICBM's altogether, including 50 mobile missiles.

Sea-based ballistic missile forces are conducting test flights of the new Trident II Intercontinental Ballistic Missile. Each such missile carries up to ten 500 kiloton nuclear warheads. By this indicator and also by accuracy of fire, the new missile surpasses the Trident I Missile currently in the inventory by a factor of 3 to 5. They plan to equip not less than 10 Ohio class nuclear submarines with the new missiles. Each such submarine has 24 launch tubes.

They are continuing to equip surface vessels and submarines with Tomahawk Long Range (up to 2,600 km) Cruise Missiles. They plan to increase the range of the latest cruise missiles to 4,500 km.

The program to produce 100 new B-1B Heavy Bombers has been completed in strategic aviation. Each of these aircraft can carry up to 30 long range cruise missiles. As we all know, flight testing of the new B-2 "Invisible" Bomber has begun and it is being produced using Stealth Technology. The U.S. plans to produce 132 of these aircraft at a cost of 70 billion dollars.

The U.S. is developing the ACM [Advanced Cruise Missile] "invisible" cruise missile and will arm the B-1B and B-2 with them. It can carry up to a 200 kiloton warhead and it has up to a 4,500 km range. They plan to produce up to 1,300 of these new missiles in the 1990's.

Under the guise of modernizing tactical nuclear weapons, the U.S. is in fact developing two new types of nuclear missiles.

The Lance II missile has a range of up to 500 km and is being developed for the U.S. Army. A neutron warhead, as well as an ordinary nuclear warhead, is being developed for this missile. I would like to point out that the United States is planning to begin production of the Lance II at the same time that the USSR is destroying its tactical missiles (OTR-23) in accordance with the INF Treaty. Both of these missiles have the same range!

The U.S. is conducting intensive development of air to ground nuclear missiles for tactical strike aircraft. These missiles have a range of approximately 450 km and are capable of destroying ground targets without strike aircraft having to enter into the enemy air defense operations zone.

I must particularly emphasize that the U.S. is working to develop "third generation" nuclear weapons within the framework of the Star Wars Program: X-ray lasers with nuclear excitation, nuclear microwave and kinetic weapons, and others.

As a whole, according to assessments of Western experts, the United States expenditures for production of new models and systems of weapons will total over one trillion dollars during the 1990's.

Therefore, when American leaders once again use such words as "consolidation of power" or "a position of strength," this is not simply a tribute to the past but a confirmation of their aspiration to achieve military superiority over the USSR.

These are all obvious facts and we need to take them into account under all circumstances.

As we know, E.A. Shevardnadze, USSR minister of foreign affairs, quite recently spoke with U.S. President G. Bush and held talks with Secretary of State J. Baker. He summed up these meetings at a press conference in Washington: "We conducted serious negotiations on all the issues, including strategic nuclear weapons, conventional weapons, chemical weapons, nuclear testing, etc. We truly sensed serious progress in all directions."

Such progress undoubtedly reassures us all. And we would like to more quickly sense the practical results of the serious progress at the negotiations. The disarmament process must really progress.

FRG Minister of Defense on Port Call at Leningrad

90UM0044a Moscow KRASNAYA ZVEZDA in Russian 13 Oct 89 First Edition p 3

[Interview with G. Stoltenberg, FRG Minister of Defense, by V. Krasnokutskiy, APN correspondent in Bonn: "This Is the Path Which Leads to Trust]

[Text] We have already reported that a detachment of West German naval ships is making a friendly, official call at Leningrad on 13 October. At our request V. Krasnokutskiy, APN correspondent in Bonn, asked the FRG Defense Minister a number of questions.

[Krasnokutskiy] Mr. Minister, what significance do you attach to the visit by the detachment of FRG naval forces to the USSR?

[Stoltenberg] This is the first time our combat ships have visited the Soviet Union, or, to put it differently, the first visit to your nation by regular Bundeswehr units. It was preceded by contacts at the very highest political and military levels: trips by the federal minister of defense and the inspector general of the Bundeswehr to the USSR. It was during the final visit that the decision was made to schedule a meeting between Soviet and West German servicemen. If it is the beginning of movement toward greater normalization of our relations and toward trust, I shall only welcome that. Personal acquaintanceship and direct discussion between the personnel of our armies can make an important contribution to the strengthening of mutual understanding.

[Krasnokutskiy] Leningrad is one of the most beautiful cities in Europe, but it is also "enemy territory" on NATO maps. To what extent will the fact that West German sailors will get to know the city and its residents influence the combat readiness of the West? Do you not find a certain contrariety between the dissolution of the "enemy image" and the need to strengthen combat readiness?

[Stoltenberg] We do not have the "enemy image." As you have rightly pointed out, Leningrad is a city in the Soviet Union and not "enemy territory." Leningrad is dear to me also because I visited the city in the '60s as federal minister for science. I was the first minister since Konrad Adenaur to visit the Soviet Union. The city and its residents made an indelible impression on me, and I am confident that our servicemen can appreciate the hospitality of the Leningraders. Our sailors are already acquainted with many nations and are therefore something like envoys promoting the peaceful coexistence of all peoples. Bundeswehr soldiers, like Soviet military personnel, are guarding their nation. Combat readiness is a good thing, as you have said. Readiness to take action is even better, however. We see no negative elements in the policy of dialog and detente. On

the contrary, such a policy can only exist on the basis of defense preparedness, which earns trust.

[Krasnokutskiy] The press reports that the visit is to contribute to the normalization of relations between our armed forces. How do you understand this?

[Stoltenberg] Processes which we welcome are occurring in the Soviet Union and other states of Eastern Europe. We are prepared to support the reforms and to stimulate cooperation in the economic, scientific and cultural areas. We feel that this will lead to further normalization of relations between our peoples and states. It is essential that our armed forces and their personnel not remain on the sideline in this process.

[Krasnokutskiy] What is the reaction of the NATO leadership to the establishment of contacts between our armies?

[Stoltenberg] There is no NATO leadership as such. We make up an alliance of 16 sovereign states in which all decisions are made on a collective basis. At summit meetings and during bilateral talks all of our partners welcomed these contacts and approved of their prospects.

Observer's Report on Bundeswehr Exercise

90UM0044B Moscow IZVESTIYA in Russian 14 Oct 89 First Edition p 5

[Report by Sergey Guk, IZVESTIYA special correspondent; Bonn, Munster, Koblenz, Brussels (conclusion; for beginning see IZVESTIYA, No 235): "On That Side: Soviet Journalists at Bundeswehr Exercises and at NATO Headquarters"]

[Text]

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And so, having shown us "live" maneuvers in which the Bundeswehr demonstrated its training, the organizers of the trip gave us an opportunity to engage in a discussion with military experts.

Nuclear Deterrence-For all Times?

Most NATO experts believe that nuclear weapons do force the politicians to be more circumspect, that they are a reliable means of preventing war, and that they will retain this mission even in a situation in which the East and West disarm to a level at which they will be incapable of conducting large-scale, surprise offensive operations. Stability is one thing, but we also have to have a sort of "insurance policy" against any sort of unexpected developments or chance occurrences. Reliance on strength is the most dependable means.

We can and even should reduce nuclear arsenals to minimal levels. May peace and trust always reign in Europe. Even then, however, we should keep a "nuclear club" in reserve. Almost everyone in the world knows about the production of nuclear weapons. It is impossible to deprive mankind of this knowledge and know-how. What if some other nations develop such weapons at a time when NATO

and the Warsaw Pact are eliminating their stockpiles? Then what? Would you tell us to remain defenseless against nuclear blackmail? This is approximately how NATO thinks.

There were deviations from this pattern, however. A representative of the Federal Chancellor spoke out more resolutely than others on the matter. If the USSR's superiority in conventional weapons is eliminated as a result of progress at the Vienna talks, the NATO doctrine of nuclear deterrence can and should be reconsidered. Right now, however, all of the discussions have shown that they fear us. Why?

We heard the most thorough answer during a discussion lasting many hours in the FRG Ministry of Defense. At first we merely listened. One after another, energetic officers from the Political Policy Section took the stand and drummed into our heads, using slides (diagrams, maps, tables and calculations) what a heavy burden the impending threat from the East has forced the NATO members to live under all these decades.

The screen shows data on the number of tanks from the Atlantic to the Urals (Warsaw Pact superiority). A clickand a new slide: once again, superiority. In artillery. In infantry combat vehicles. In transport helicopters. A new subject: the Warsaw Pact's capability for attacking Western Europe (the word attack was clearly enunciated for the first time during the entire trip) and NATO's defense capabilities. The West is concerned about the size of the Warsaw Pact armed forces, about their capability for mobile, surprise and large-scale offensive operations. Furthermore, the next speaker stressed, NATO has voluntarily committed itself not to be the first to employ these weapons, to resort to a nuclear strike only in case it is attacked. (Not a word was said about our commitment not to be the first to employ nuclear weapons). The alliance thereby took the risk of waiting for aggression and only then repelling it.

The list of grievances seems endless. Why is the USSR modernizing its tanks? They received confirmation of this fact out of the mouth of M.A. Moiseyev, chief of the General Staff of the Armed Forces of the USSR, himself. He explained the reasons, to be sure: the obsolete pool, a drastic lag behind NATO in modern tanks. A balance is needed. All of this is understandable, of course, but nonetheless, "we are concerned about the scale of Soviet modernization at a time in history when the Soviet leadership is concentrating its efforts on the economy (we could not help being touched by this kind of concern for the Soviet economy) and has declared a limitation on military outlays...."

NATO is also concerned about the course of the reforms being carried out in our nation. More precisely, about "the risk involved in the changes occurring." What if the situation gets out of control because of economic difficulties, growing tensions in inter-ethnic relations and the opposition of a number of allies of the USSR to the policy of renewal? Moscow's intentions are to reduce confrontation and superarmaments and to establish a peaceful

European order, all of which can only be welcomed. But where is the guarantee that there will be no "about-face"? There can be only conclusion: that we need to be on guard.

And What About the Other Imbalances?

The discussion somehow did not get around to imbalances in NATO's favor (in the area of those very naval forces, for example). They had to be reminded. "You have good submarines," a Ministry of Foreign Affairs diplomat said, laughing it off. Another argument was that the stretchedout lines of communication and the vulnerable flanks in NATO's north and south force it to rely on powerful naval forces. And NATO Secretary General M. Woerner expressed this point of view:

"Naturally, the new safety structure must consider the lawful interests of the USSR. With respect to sea-based forces, we need to consider two factors. In the first place, we need to see the fundamental differences between the Warsaw Pact and NATO in the geostrategic respect. If you look at the map, you will see that the USSR and its allies form a single, monolithic territory. The Atlantic alliance is split by an ocean expanse of 6,000 kilometers. Naval forces are for us what railways are for you."

M. Woerner also had a second view:

"Ground forces are needed for an offensive war. (As though NATO keeps its ground forces only for parades—S.G.). The navy cannot attack Moscow or Kiev. I therefore do not believe that the USSR perceives any danger from the NATO naval forces. It should not, at any rate."

They tried to convince us that NATO's naval forces are intended exclusively for transporting reinforcements and guarding communication lanes. Nothing else. They made practically no mention of the fact that one modern submarine armed with nuclear missiles is capable of wiping half of Europe off the face of the earth.

Naval forces, of course, are not a subject of discussion at any of the talks presently underway, because NATO does not want this. Is it a superiority with which the West does not intend to part? It could be considered that, replied one of the experts of the FRG's Ministry of Foreign Affairs. One of his colleagues vaguely hinted that it would possibly be the turn of naval forces at some point. A third person, a representative of the Ministry of Defense, expressed it more diplomatically: Sea-based forces are exclusively under the jurisdiction of the USA and the USSR, and the problem does not concern the FRG. Bonn wants a stable situation in Europe, while the superpowers must resolve global issues.

New Hopes for the Vienna Talks...

Everyone spoke of the talks on conventional armed forces in Europe presently underway in the Austrian capital. There are firm, reciprocal intentions of bringing them "to a victorious conclusion" no later than December 1990. Ratification in the national parliaments will take several more months. So 1991 could be a realistic target for a treaty to take effect.

In the opinion of the experts, the political consequences for Europe of reductions in the NATO and Warsaw Pact military capabilities will surpass all previous expectations. Movement toward military parity and stability will begin. This is still not stability per se, however. Each side will still have 20,000 tanks, an enormous destructive capability. We need to continue moving ahead and reducing the weapons levels. NATO will then not have to modernize the American tactical missiles in Europe. Military outlays will be reduced and additional funds will be freed for resolving national and global problems, primarily the healing of wounds inflicted upon the environment.

"The USSR and the West," M. Woerner stressed, "are seeking ways to create new security structures which take the interests of all states equally into account. I very much want the spirit of glasnost and restructuring to increasingly affect the development of our relations."

NATO pins great hopes on the process of democratic transformations and reforms in the USSR and the openness with which problems, including those of defense and security, are being discussed at the Congress of People's Deputies and in the USSR Supreme Soviet. After all, the participants in the discussion stressed, all important military decisions in the West are made only after lengthy parliamentary debate.

However—once again, that "however"—we need always to define the political intentions and capabilities of the other side. No one in the West today believes that the USSR's policy is to prepare for aggression. Nonetheless, political intentions can change. This is one of the lessons of history. We therefore need to establish a security structure in which no one would be able to use armed forces for aggression. Vienna offers this possibility.

(A small but revealing detail about which we were told is that many Western firms specializing in modern technologies have now begun demonstrating a vital interest in the production of equipment making it possible reliably to monitor the disarmament process. Have they felt competition?)

...And Dreams of Altering the Status Quo

While reading the morning newspapers on the way from Bonn to Brussels, I came across an article in DIE WELT: "NATO's Goal Is the Neutrality of Eastern Europe." With a reference to "NATO circles," it spoke of the existence of a secret plan for achieving a "neutral status for the nations of Eastern Europe." More simply stated, for pulling one state after another out of the Warsaw Pact. As payment for the neutrality they have made the vague promise to these states of "access to the expanded European Community, but membership in the Western alliance (NATO—S.G.) is ruled out."

The objective, DIE WELT goes on to say, is "to overcome the status quo in Europe in an ordered and coordinated manner" (rhetoric aside, this means altering the political and military situation in their favor). The breakup of the status quo is to result in the "resolution of the German"

question." "Considering the complexity and sensitivity of the problem," however, the formulators of the plan deliberately set it aside "for the immediate future."

I asked M. Woerner to comment on the article.

"There is no such plan as it is described here," he sated. "I can say this with full responsibility as Secretary General of NATO, who would certainly know of the existence of such a plan if one had been worked out. At the same time, I would add that the Warsaw Pact's makeup, the same as the matter of whether individual states are members, is a decision to be made not by NATO but by the Warsaw Pact nations themselves. In the process of open and free self-determination."

M. Woerner told how he pictures the new millennium, although with a stipulation ("I do not presume to predict the future"):

"I can express my hopes that at least in Europe states of the East and West, including both superpowers, will reach agreement and establish a balance of power with fewer weapons, which will in effect rule out the danger that military weapons will be used for aggressive purposes. I hope to see a drastic improvement of the situation with respect to human rights to a free exchange between our states. I hope that someday we will establish an exchange between young Germans and Russians, who can freely visit one another, like the exchange we have with France. I believe that NATO and the Warsaw Pact will continue to exist after the year 2000. I see a new function for them, more as military stabilizers for maintaining political cooperation.

"We can agree that NATO and the Warsaw Pact are beginning to move cautiously, one small step at a time—no, not toward rapprochement; that would be an obvious exaggeration—but toward the establishment of sensible military structures making it possible to rule out war in Europe. Obviously, this will be accompanied by a reduction of the potential for mutual suspicion and distrust."

("You are surprised when we talk about the Soviet attack capability, while we are surprised when Moscow tells us about a NATO policy of surrounding the USSR, about a threat from sea-based forces. We therefore need to engage in frequent, open dialog to eliminate misunderstandings." This statement was heard in the FRG Ministry of Defense).

The plan mentioned in the DIE WELT article most likely does not actually exist and can be attributed to the overactive imagination of a Springer journalist. But who would vouch for the fact that some NATO official does not harbor in his mind tempting thoughts of "neutralizing" the Warsaw Pact? It is almost certain that the article was based on backstage discussions of this kind in a confidential conversation over a cup of coffee.

It would be short-sighted, however, to fail to mention something else. The population of the Western nations refuses to believe in the "threat from the East." Even the Bundeswehr soldiers, we were told by General Zöder, are now talking about why only high-ranking officials travel to Moscow. They themselves want to associate with Soviet servicemen....



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